

'It's Important to Know In Time'

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The Newspaper of the Industry

Inside Dope

By George F. Taubeneck

Give 'Em a Break
Product of Environment
Function of Free Press
Clark Is Worried
Money
Newcomb Is, Too
And Jim Nance

Give 'Em a Break

One of our subscribers in York, Pa., protests bitterly over our attitude toward the OPA. He doesn't say why; he just doesn't like it. "It's not helping win the war," he tells us. Well, after we got over the shock of finding somebody in the business with a good word for OPA, we got to thinking that maybe he has a point.

Any OPA executive has a thankless job. Few of us would want any part of it. And when we criticize individual orders and rulings and administrators, possibly we don't realize how tough it must be to get competent qualified men to stick their necks into the OPA food chopper.

Product of Environment

Last week we talked about the bitter intra-OPA fight between Maxon and Galbraith. They lead two schools of thought—one tough, one kindly—both equally sincere.

In this discussion we noted that Galbraith, the advocate of toughness, was not exactly a hail-fellow-well-met type of person. Now that we think of it, we wonder how he could possibly be bright and cheerful after two years in the job of trying to sit on the lid of our nation's boiling cauldron of prices.

No doubt from where he sits everyone is trying to beat the game. Just as our attitude is influenced by all the damning of OPA that we hear, so his must be colored by all the chiseling, arguing, pleading, and circumvention that affront him day by day.

Any one of us would get pretty sour living a life like that—particularly if we were as conscientious as Galbraith is. In our criticism of individual acts and orders, none of us realize what those fellows are up against. Perhaps we all should be more tolerant, even when it hurts.

Function of Free Press

The foregoing remarks shouldn't be interpreted as a sign that the News is going soft. This paper shall continue to call the shots as it sees them, to criticize government orders when they are poorly drawn, self-defeating, or unworkable.

In a democracy one of the chief functions, and duties, of the free press is to keep the spotlight on public officials, to let the people know what's going on, to point out errors, fallacies, miscarriages of justice.

We'll try to do our little part in our little segment of the economy. But maybe we can be nicer about it.

Incidentally, in an adjoining column, we take issue with the published thinking of the president of an advertising agency which places three accounts with us.

Clark Is Worried

Lee Clark, Frigidaire's personable advertising and sales promotion manager, was in town the other day. He expressed considerable concern over all the advertising and publicity involving fabulous, fairy-land, postwar refrigerators.

If the people are conditioned to
(Concluded on Page 2, Column 1)

Air Conditioning & REFRIGERATION

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'Liberty, Employment, And No More Wars' —An Open Letter to T. K. Quinn

Mr. T. K. Quinn, President
Maxon, Inc., New York City

Dear Ted:

It was a pleasant surprise to encounter your new book on display last week. In its title you really have something—possibly the most sales appeal of any book title to hit the stalls in our generation. On that platform, "Liberty, Employment, and No More Wars," you could run for President of the United States. As a matter of fact, it's liable to supplant "Home, Mother, and the Flag" as the basic theme for political orations during the next two decades.

You come out strongly against selfishness, greed, and price-cutting, which ought to be as attractive politically as the always-good stand against Crime, Corruption, and the Boll Weevil.

The book is worthy of you. (To your old friends in the refrigeration industry, that's perhaps the highest compliment one could pay it.)

Toward the end, where you discuss methods of post-war cooperation for peace and prosperity, you have struck a saner note than any of your philosophical contemporaries, including Messrs. Willkie, Burnham, Wallace, and Culbertson.

However, in the front of your book, where you damn "competition" in language reminiscent of Philip Wylie's "Generation of Vipers," you lay yourself wide open for some sharp argument.

One would gather, from reading your polished phrases, that competition is a thing of the past, that many of our troubles would disappear with the repeal of the Sherman Anti-Trust Act, that there is an inexorable trend toward corporate bigness, toward overall organization and control, toward the virtual elimination of the small business man.

Now look, Mr. Quinn: We have a small business here; most of our clients (subscribers) and many of our customers (advertisers) are small business men; and we don't intend to take your allegations lying down.

When you say, on page 131, that "thousands of small dealers cannot come back and with their passing will also go hundreds of jobbers and distributors who served them," those are fighting words.

We agree with you that there's a mighty trend in the world today toward centralization of authority, both economic and political (and how those two have become intertwined). That's the big trouble with the world today. But we emphatically do not agree that we should "relax and enjoy it." If you fell into the swift Niagara River above the Falls, would you supinely ride with the current over the brink? The game fish swims upstream, and we hope to God that there are plenty of game fish among America's small business men.

Don't forget that every big business was once a small business. Shall we dry up this source of progress?

Your solution to our economic ills is an "Economic Senate" of top industrialists, to whom would be entrusted all authority for fixing prices, dividing and allocating production, saying who should make what and for how much, and running the nation's business.

That's a sweet idea of itself. There much to be said for a Swedish-style union of Employers. But don't you go a bit too far? Don't you fail to heed the law of human nature which has it that too much power breeds corruption, complacency, and conservatism?

This "economic government," you say on page 179, would be "largely self-perpetuating." Of course it would be. Ruling cliques invariably seek to keep themselves in office indefinitely. And to do so, they often perpetuate stagnation. They make it most difficult for newcomers with new ideas, with better ways of doing things, to break into their select circle.

You yourself make one of the strongest indictments against centralization of power I've ever read. On page 52 you say:

"Centralization is evil because it is essentially inhuman. It impersonalizes, disregards the individual and undertakes by remote regulation to control human situations which it never sees, feels or understands. Any vaunted 'efficiency' which it claims can only be attained at the cost and sacrifice of human values, which must ultimately render it worthless."

But, you say in effect, centralization is OK if business men do it. You damn centralization in politics, yet argue that it is not only inevitable in business, but wise.

Perhaps the chief fault with centralization of authority is

(Concluded on Page 21)

Ban on Air Conditioning Repairs Is Lifted; Other Changes Made In L-38

WASHINGTON, D. C.—Several highly important changes in Limitation Order L-38 controlling production and delivery of commercial and industrial refrigeration and air conditioning machinery were made Thursday, May 20, by War Production Board.

The amended order L-38 now removes the restrictions, in Order L-38 at least, on the repair and maintenance of air conditioning systems.

OPA Clarifies Rationing For Locker Patrons

DETROIT—The muddle of confused rulings that developed on the question of the use of slaughtering and processing, as well as storage facilities of refrigerated locker plants under food rationing regulations, was cleared up somewhat last week with the issuance of an amendment to OPA Ration Order 16.

Here is how the situation apparently stands at present, with an accounting of some of the conflicting opinions that have been issued with respect to food rationing as it affects the refrigerated locker plant patron:

Following a survey of the amount of meat held in locker storage plants,

Senate Hearings To Be Reported at Meeting

CHICAGO—A quickly called meeting of manufacturers, dealers, and suppliers of refrigerant locker plant equipment was scheduled for Sunday, May 23, at the Lake Shore Athletic Club in Chicago.

Purpose of the meeting is to listen to and discuss a report on the recent U. S. Senate hearings on the question of further expansion of locker plants in conjunction with the food conservation program.

the OPA announced officially that such foods as were held in lockers did not have to be declared at the start of rationing, and that "food may be removed from the locker plants without the surrender of ration points by the patron."

But the question naturally arose, what about the further purchase of meats in large quantity and subsequent processing and storage in the locker, and also the processing and quick-freezing of home-grown fruits and vegetables and storage of such products in the locker.

(Concluded on Page 24, Column 1)

P-126 Order Will Not Be Replaced by CMP

WASHINGTON, D. C.—CMP Regulation No. 5 governing repairs will not replace Preference Rating Order P-126 which provides ratings for refrigeration repairs and maintenance, it was learned here last week following a meeting of the General Industry Advisory Committee of the Refrigeration Industry. An official announcement on this is expected next week.

It was also learned that the causes of the shortage in the May allocations of "Freon" refrigerants have been remedied, but that the cylinder shortage is again acute and that every means must be taken to keep the cylinders moving.

surface heating equipment" and "industrial type humidifying equipment."

Substitutes the term "maintenance and repair service" for "emergency repair service" and defines the former to include maintenance servicing as well as emergency servicing to bring such servicing within the scope of the order.

Changes the restrictions on farm milk coolers to include only evaporator coils and condensing units.

Inserts a new paragraph (e) (4) to provide for the extension of authorization and preference ratings for commercial and industrial refrigeration and air conditioning ma-

(Concluded on Page 4, Column 1)

Low Temperature Developments In Spotlight at ASRE Conclave June 1-3

CLEVELAND—Authoritative data, both in the form of formal papers and discussions, on low temperature refrigeration will be presented as the core of the most intensive technical session for any American Society of Refrigeration Engineers Spring Meeting within recall at the convention to be held June 1-2-3 at the Hotel Statler in Cleveland.

Multi-stage compression systems, low temperature test cabinets, refrigeration of electrodes in welding, and use of refrigeration in synthetic rubber manufacture are phases of the low temperature subject which will be delved into.

Also scheduled on the technical sessions program is a talk "Refrigeration and the War Production Board" by Sterling F. Smith, Chief, Refrigeration and Air Conditioning Section, General Industrial Equipment Division, WPB.

Another special feature is the

"Corrosion Conference" to be held the first afternoon of the meeting, June 1. At this session five speakers will cover the entire subject of corrosion, with special emphasis on the problem as it applies to the refrigeration field. This session will be particularly significant for engineers responsible for maintenance problems.

While the entertainment angle of the convention is being de-emphasized in view of wartime conditions, the Cleveland Section hosts have made many fine plans to make pleasant and entertaining the "off-hours" at the meeting.

Their plans start with an informal cabaret-type get-together party the night of June 1 in the Euclid Ballroom—with dancing and vaudeville entertainment arranged by a committee under John A. Schurman.

(Concluded from Page 1, Column 5)

Full Plans Outlined For Technical And Social Sessions at ASRE Meeting

(Concluded on Page 3, Column 1)

On Tuesday noon the conventionites will assemble for the "Welcome Luncheon" with the speaker L. F. Livingston, manager of the agricultural extension division, E. I. du Pont de Nemours & Co.

The A.S.R.E. dinner, with national president Charles R. Logan as toastmaster, will be held at 8 p.m. Wednesday, June 2. The speaker will be James F. Lincoln, Lincoln Electric Co., Cleveland, a nationally known industrialist and the center of discussion because of his philosophy on management-worker relationships. He will speak on "What About Postwar?"

The dinner will be preceded by a cocktail party. Warren W. Farr, past chairman of the Cleveland Section, will be in charge of the dinner arrangements.

For the women a special luncheon, style show, and bridge party at Halle Bros. store is being planned, probably for Wednesday noon.

The "golfing situation" is summed up in a recent letter from Herb Heisterkamp, chairman of the golf committee, as follows:

"We are doing everything possible to arrange a good golf party for, first, we wish to be good hosts; and second, we feel that a number of the members who like to play golf will not have much opportunity to get out this coming season, and this will be a good chance for them to get out."

"In connection with the prizes, there will be the Wolverine gold cup for the section whose member has low gross score, and the Kelvinator silver cup for the section whose member has second low gross score. Then there will be a new trophy which Les Avery is putting up, which will be called the Lake Erie Trophy, and will go to the section whose team has the low net total score on handicap play."

"In normal times a section golf team must be made up of four section members, but during war time a section team may be composed of either two, three, or four members, and a pro-rated low net total team score will be used to determine the winner."

Members of the convention committees are as follows:

General convention committee: H. D. Andress, chairman; Walter R. Beach, Warren W. Farr, Lester T. Avery, J. E. Wilhelm, A. M. Fenwick, C. A. Beck, W. Saul Smith, W. P. Kohn, V. N. Fedoroff, John A. Schurman, C. H. Boylan, M. R. Carpenter, H. W. Heisterkamp, Mrs. H. D. Andress.

Inspection Trip: Walter R. Beach, chairman; M. R. Carpenter, vice chairman; V. N. Fedoroff.

Transportation: A. M. Fenwick, chairman; H. L. Craumer, vice chairman; John H. Benson.

Publicity: John A. Schurman, chairman; C. H. Boylan, vice chairman.

Meetings: C. Austin Beck, chairman; Gayle B. Priester, vice chairman; H. W. Heisterkamp.

Reception: J. E. Wilhelm, chairman; R. A. Lennox, vice chairman; L. G. McCoy, George J. Schmidt, Paul D. Wurzbarger, Lowell E. Jones.

Finance: V. N. Fedoroff, chairman; J. A. Faulb, A. Hjelm.

Entertainment: Lester T. Avery, chairman; H. W. Heisterkamp, W. Saul Smith, Walter P. Kohn, W. W. Farr, John Schurman.

Complete program for the convention is as follows:

May 31

7:00 to 9:00 p.m.—Advance registration.

8:00 p.m.—Meeting of A.S.R.E. Finance Committee.

8:30 p.m.—Meeting of A.S.R.E. Executive Committee.

June 1

9:00 a.m.—Registration.

9:30 a.m.—First Session—Charles R. Logan, president of the A.S.R.E., presiding.

"Low Temperatures by Means of Multi-Stage and Other Compression Systems"—Harry Sloan, advisory engineer, the Vilter Mfg. Co., Milwaukee, and past president of the A.S.R.E.

"Insulation for Low Temperatures"—John F. Stone, Johns-Manville Corp., New York, N. Y.

"Refrigeration and the War Production Board"—Sterling F. Smith, Refrigeration and Air Conditioning Section, General Industrial Equipment Division, WPB, Washington, D. C.

12:30 p.m.—Welcome Luncheon—H. D. Andress, chairman of the Cleveland Section, presiding.

Speaker—L. F. Livingston, manager of the agricultural extension division, E. I. du Pont de Nemours & Co., Wilmington, Del.

2:30 p.m.—Corrosion Conference—Clifford F. Holske, sales manager, the Vilter Mfg. Co., New York, N. Y., and A.S.R.E. representative on the American Coordinating Committee on Corrosion, presiding.

"Present Practice in Selection of Metals for Use with Corrosive Substances"—W. Z. Friend, the International Nickel Co., Inc., New York, N. Y.

"Fundamental concepts of Corrosion"—Robert B. Mears, Aluminum Research Laboratories, Aluminum Co. of America, New Kensington, Pa.

"Corrosive Inhibitors"—V. V. Kendall, Department of Metallurgy and Research, National Tube Co., Pittsburgh, Pa.

"Organic Coatings"—G. W. Seagren, Mellon Institute of Industrial Research, University of Pittsburgh, Pittsburgh, Pa.

"Cathodic Protection"—R. H. Brown, Aluminum Research Laboratories, Aluminum Co. of America, New Kensington, Pa.

4:30 p.m.—Meeting of A.S.R.E. Standards Committee.

8:30 p.m.—Family Party. Cabaret style—dancing, special entertainment features.

June 2

9:30 a.m.—Second Session—A. B. Stickney, vice president of the A.S.R.E., presiding.

"Industrial Low Temperature Cabinets"—R. H. Swart, Kold-Hold Mfg. Co., Lansing, Mich.

"Refrigeration of Electrodes in Welding"—A. G. Munsan, Frostrode Products, Detroit.

"Mobile and Portable Refrigerators for the Armed Forces"—Mark E. Mooney, manager of refrigeration sales, Carrier Corp., Syracuse, N. Y.

12:30 p.m.—Meeting of A.S.R.E. Program Committee.

12:30 p.m.—Meeting of A.S.R.E. Sections Committee.

3:30 p.m.—Meeting of A.S.R.E. Technical Committees.

8:00 p.m.—A.S.R.E. Dinner. L. T. Avery, presiding.

Speaker—James Lincoln, Lincoln Electric Co., Cleveland, Ohio.

June 3

9:30 a.m.—Third Session—John F. Stone, vice president of the A.S.R.E., presiding.

"Synthetic Rubber"—O. D. Cole, Firestone Tire and Rubber Co., Akron, Ohio.

"Refrigeration Activity through the WPB Advisory Committee"—Marshall G. Munce, special assistant to the president, York Ice Machinery Corp., York, Pa.

Third speaker to be announced later.

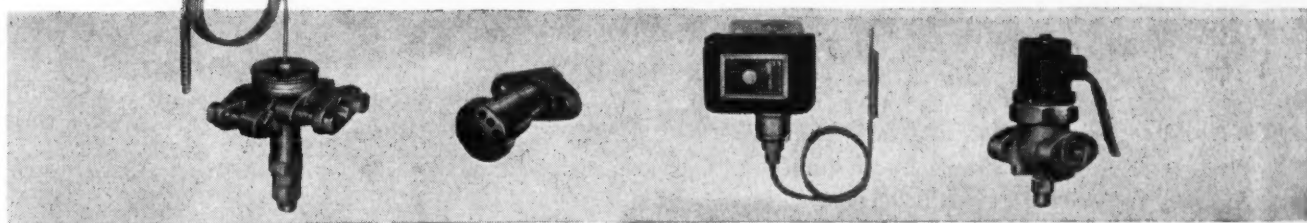
Presentation to A.S.R.E. membership of Proposed American Standards on Computing Food-Storage Volume and Shelf Area of Automatic Household Refrigerators, and Text Procedures for Household Electric Refrigerators.

12:30 p.m.—Meeting of A.S.R.E. Council.

Perfect
HARMONY



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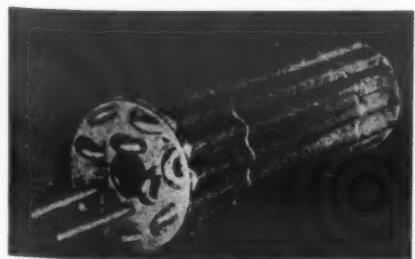
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New Amendments to L-38 Remove Many Restrictions Criticized by the Field

(Concluded from Page 1, Column 5)
chinery and equipment assigned on PD-830 or PD-831.

Requires the owner of a repaired air conditioning system to dispose of replaced parts through regular scrap channels or to the dealer or producer as a condition of his purchase of new parts.

Eliminates the provision prohibiting the manufacture of compressors 50 hp. or larger until receipt of authorized purchase order.

Prohibits sale of air conditioning and refrigerating equipment of 3 hp. or larger by any person, except on an authorized order.

Permits delivery of certain reconditioned or rebuilt parts or assemblies in exchange for similar parts and assemblies which are defective.

A number of other minor changes are made to correct and simplify the wording of the original order. Following are the amended provisions:

Text of Amendments

§ 1071.1 General Limitation Order L-38—
(a) Definitions. For the purpose of this order:

(1) "System" means any refrigerating or air conditioning system, consisting of an assembly or combination of machinery, equipment, or other apparatus designed primarily to lower the temperature of, or remove water vapor from gaseous, liquid, or solid matter, directly or indirectly, by mechanical, chemical or physical means. The term shall not include a domestic mechanical refrigerator as defined in paragraph (a) (10), a domestic

ice refrigerator as defined in paragraph (a) (11), a farm milk cooler as defined in paragraph (a) (12), or heat exchanger equipment as defined in paragraph (a) (15) of this order.

(2) "Parts" means any parts, assemblies of parts, equipment, insulated enclosures and cold storage doors, accessories, implements or devices designed or intended for incorporation or use in a system or for installation therewith in causing it to perform its functions, except the following materials: Liquid or gaseous refrigerants; oil or other lubricants; cleaning fluids or other solvents; anti-freeze fluids; paints, enamels, varnishes, thinners and seam fillers; wax polishes and rust preventives; soldering and brazing fluxes and welding rods; non-metallic filters; belts and belting; gaskets; packing; insulating materials necessary for maintenance and repair service or to partition an existing enclosure; small hardware, such as nuts, bolts, washers, screws and cotter pins; (although nothing in this order relieves any person from complying with any provision in any other order of the War Production Board which may be applicable to any of such excepted materials).

(3) "New," when applied to any system or part, means a system or part that has never been sold and delivered to any person acquiring it for use; "used" means any system or part which has been sold and delivered to any person acquiring the same for use (regardless of whether or not it has subsequently been reconditioned or redesigned); and "reconditioned" means any system or part which has been repaired, rebuilt or redesigned using any new component parts.

(6) "Producer" means any person to the extent that he is engaged in the manufacture, fabrication, or assembly of systems or parts, or industrial type extended surface heating equipment, or industrial type humidifying equipment. The term shall not include any sales or distribution outlet of a producer.

(7) "Dealer" means any person, other than a producer, engaged in the business

of selling or distributing new, used, or reconditioned systems or parts or industrial type extended surface heating equipment, or industrial type humidifying equipment, whether at wholesale, retail, or otherwise. The term includes any sales or distribution outlet of a producer.

(8) "Maintenance and repair service" means the use, whenever necessary, of the minimum amount of parts and other material required for (i) keeping any system in effective and safe working condition, or (ii) restoring a system to effective and safe working condition when it has become unfit for service by normal wear and tear, unavoidable damage, or failure of any parts. The term includes the necessary replacement of any defective component parts of the high side, low side or insulated enclosure, if such parts either cannot be repaired, or consist of a sub-assembly which is normally exchanged in assembled form in order to permit immediate restoration of the system to service and subsequent shop reconditioning of such sub-assembly (such as controls, regulators, coils, motors, sealed units, and compressors and condensers). It shall not, however, include any enlargement of the size or capacity of the system or any modernization or improvement of its design, or the replacement of the entire high side or condensing unit with or without motor or condenser (except in sealed unit types), or the entire low side, or the entire insulated enclosure.

(9) "Deliver" means: (i) to transfer physical possession, title, or ownership; or (ii) to install for use (but not including a temporary installation solely for the purpose of testing the system or part, or the moving of an installed system from one point on the owner's property to another); or (iii) to place in the hands of any carrier or otherwise in transit for transfer of possession to another person (regardless of whether such transfer, installation, or shipment is for the purpose of sale, trade, loan, lease, or other type of transaction).

(12) "Farm milk cooler" means any immersion (drop-in) type or surface (tubular) type milk cooler for use on a farm, and includes any system or parts which have been installed in any such cooler, or acquired pursuant to an "authorized order" (as defined in paragraph (a) (4)) by a manufacturer of farm milk coolers for installation in such coolers. The term shall not include any new refrigeration evaporator coils, or refrigeration condensing units prior to actual acquisition thereof by such a manufacturer.

(15) "Heat exchanger equipment" means an assembly, bundle, or nest of bare or finned tubes installed in a shell or pressure vessel, and designed for the transfer or exchange of heat between two or more fluids (liquids, gases, or vapors), without the use, as a refrigerant, of (i) ammonia, carbon dioxide, methyl chloride, sulphur dioxide, or chlorinated hydrocarbon refrigerants (trichloromonofluoromethane, dichlorodifluoromethane, dichlorotrifluoromethane, trichlorotrifluoroethane, and dichlorotetrafluoroethane), or (ii) brine or water which has been cooled by the use of ice or any of such refrigerants.

(17) "Any person acquiring the same for use" shall include the owner, lessee, or other person who purchases or otherwise secures delivery of any systems, parts, or other equipment covered by this order, for use; but does not include a dealer or producer acquiring systems, parts or equipment for resale, and reselling the same.

(18) "For direct use by the Army, Navy, Maritime Commission or War Shipping Administration" means for direct use by the regular personnel or regular employees of such an agency only, but regardless of whether delivery is made by the producer or dealer directly to such an agency, or through or to an intermediate dealer or contractor. The term does not mean for use in any privately operated plant or shipyard financed by, or controlled by, any of such agencies, or operated on a cost-plus-fixed-fee basis.

(b) Restrictions on deliveries—(1) Parts for maintenance and repair service. (i) No dealer or producer shall deliver any new or reconditioned parts to any person acquiring the same for use, and no such person shall accept delivery of any such parts, unless the parts are delivered:

(a) For use in maintenance and repair service and to fill a purchase order bearing a preference rating of AA-4 or higher, or

(b) By an agency authorized to apply ratings under Preference Rating Order P-126, in performing the service provided for by said order, or

(c) To fill an "authorized order," or

(d) For direct use by the Army, Navy, Maritime Commission, or War Shipping Administration, including orders for any Army or Marine Corps post exchange or any U. S. Navy ships service department; and

the parts replaced shall be disposed of in accordance with paragraph (e) of this order, if made of metal.

(ii) Any producer or dealer receiving an order, bearing a preference rating of AA-4 or higher, for parts which are permitted to be delivered only for use in "maintenance and repair service," may deliver such parts to a person acquiring the same for use, unless the producer or dealer knows, or has reason to believe, that such parts will not be used for "maintenance and repair service."

(2) Other equipment.

(iv) Items for farm milk coolers. No dealer or producer shall deliver any new refrigeration evaporator coils or refrigeration condensing units for use in farm milk coolers, to a manufacturer of such coolers or to any other person, except pursuant to an "authorized order." The delivery of any such refrigeration evaporator coils or refrigeration condensing units acquired pursuant to an "authorized order" by such a manufacturer, or owned by him on April 6, 1943, or of any farm milk coolers in which any such coils or units have been installed, shall not be restricted by the terms of this order.

(v) Items exclusive of List A and List B items and farm milk coolers. No dealer, producer or other person shall deliver any new system of any kind or type not referred to under the preceding subdivisions (i), (ii), (iii), or (iv), or any used sys-

tem rated at 3 hp. or more or having a rated capacity of three tons or more (American Society of Refrigerating Engineers Specifications), to any person acquiring the same for use, except pursuant to an "authorized order," or for direct use by the Army, Navy, Maritime Commission, or War Shipping Administration.

(vi) Parts not for maintenance and repair service. No dealer, producer or other person shall deliver, to any person acquiring the same for use, and no such person shall accept delivery of, any of the following, except pursuant to an "authorized order," or for direct use by the Army, Navy, Maritime Commission, or War Shipping Administration:

(a) New parts of any kind or size, if not delivered in accordance with paragraph (b) (1) (i) above; or any

(b) Used high side, compressor, turbo blower, condenser, low side, or evaporator, designed for use with a system rated at 3 hp. or more or having a rated capacity of three tons or more (American Society of Refrigerating Engineers Specifications), if not delivered in accordance with paragraph (b) (1) (i) above.

(d) Restrictions on production—(2) Production for permitted types or uses. No producer shall manufacture a greater quantity of any type of system or parts for assembly into new systems (exclusive of replacement parts described under (3) below), production of which is permitted under the terms of this order, than the following:

During the calendar quarter beginning April 1, 1943, or during any succeeding calendar quarter, no producer shall manufacture a quantity of any system or part in excess of the greater of the two quantities of such system or part determined as indicated in (i) or (ii) below:

(i) The number of such new item for which the producer has on hand unfilled orders bearing a rating of AA-5 or higher; or

(ii) The number of such new item delivered on orders bearing a rating of A-1-j or higher during the next preceding calendar quarter.

(e) Required utilization of replaced parts. (1) When any part is delivered in accordance with paragraph (b) (1) of this order to any person acquiring the same for use, such person shall dispose of the replaced used part, if it is made of metal, through regular scrap channels, within thirty (30) days after installation of the newly installed part, unless he returns the same to his supplier (for such reconditioning or disposition as the latter may make). All such replaced parts thus obtained by a dealer or producer during any calendar quarter shall either be repaired and replaced in his inventory, or returned to his supplier of new parts, or disposed of through regular scrap channels, during or within thirty (30) days after the end of such quarter: Provided, however, That no block tin pipe shall be replaced unless an equal quantity thereof is returned to the fabricator.

(iii) Where the system requiring repair is owned by any Federal, State, or local governmental agency, bureau, department, or political subdivision which is prohibited by law from disposing of such replaced parts in the manner prescribed under the preceding paragraph (1).

(ii) The following shall be exempted from the terms of paragraph (b) (2):

(a) The temporary delivery of a used system or parts to a dealer or producer for repair and redelivery to the same owner; the redelivery of a repaired system or parts to the same owner; the loan of a new or used system or parts for a period not to exceed 30 days pending the performance of maintenance and repair service to a used system or parts; the exchange of a used sub-assembly of a type which is normally exchanged in assembled form in order to permit immediate restoration of an installed system to service and subsequent shop reconditioning of such sub-assembly; in the performance of maintenance and repair service; and the redelivery to the lessor or lender, of a leased or loaned system, upon the expiration of such lease or loan; or

(iii) The following shall be exempted from the terms of paragraphs (b) (2) and (d) (1) (i):

(a) The assembly, by any producer of single duty or double duty display cases, of any such cases, within 60 days after April 6, 1943, solely from parts which, on said date, had been fabricated or processed to the extent that use in any other type of equipment would be impracticable, if such parts were owned by such producer on said date, or were received within said period from any other such producer; (and the delivery of any such parts by any such producer to any other such producer); or

(b) The assembly by any producer of mechanical or nonmechanical drinking water coolers, of any such coolers not designed for use aboard ship, solely from parts or materials which, on April 6, 1943, had been fabricated or processed to the extent that use in any other type of equipment would be impracticable, if such parts or materials were owned by such producer on said date, or are received from any other such producer; (and the delivery of any such parts or materials by any such producer to any other such producer).

(2) Other transactions. The following shall be exempted from paragraph (b) (2):

(i) Creation, assignment and enforcement of liens—(a) The creation, or assignment of any chattel mortgage, deed of trust, conditional sales contract or other lien on any new or used system or parts;

(b) The transfer of title to, and/or delivery of, any new or used system or parts, through voluntary act or by operation of law, in bankruptcy, receivership, or assignment, to a trustee or receiver for the benefit of creditors;

(c) The attachment or seizure of any new or used system or parts by levy or other judicial process on behalf of creditors or tax authorities, or the seizure of any such system or parts by any person upon default under the terms of a conditional sales contract, chattel mortgage or other lien.

Any delivery made subsequent to any action described under (a), (b) and (c) above shall not be exempted, however.

Tester Developed For Compression Springs

ADDISON, Ill.—A new compression spring tester claimed to be a complete departure from previous makes in both design and principle, one of the most radical changes being the incorporation in the tester of a sound device, has been introduced by P. A. Sturtevant Co. here.

Besides the sound device used to indicate to the operator when the spring has been compressed to the test point without his having to watch multiple dials, the Sturtevant Co. reports the new tester built to such precision that it permits adjustment of test lengths to .003 of an inch. The company describes other changes in the spring tester as compared to earlier models. It is operated with any torque wrench, compression is against a rigid platform.

STEEL COILS FOR REFRIGERANT and BRINE

KRAMER TRENTON G.
Heat Transfer Products
TRENTON, N. J.



HEALTHFUL LIVING THROUGH FROZEN FOODS

Post-War Promise in Refrigeration

Garden-fresh, vitamin-packed foods at ANY season of the year—right out of your own HOME LOCKER PLANT... That's the BEN-HUR prophesy in post-war Refrigeration, and your greatest new-market opportunity.

★ But your future and ours waits today on speeding up war production, when Victory comes be ready for a NEW DAY in Food Preservation.



remember

BEN-HUR

FARM LOCKER PLANTS

Established in 1910

BEN HUR MFG. CO.

634 E. KEEFE AVE. • MILWAUKEE, WIS.

EXTRA PROFIT

IN NEW TYPE FOOD STORAGE PLANT—

PRESS THE BUTTON

OPEN DOOR

FREEZE THE FOOD AND NOT THE CUSTOMER

At last, a successful food storage plant where customers DO NOT ENTER THE REFRIGERATION CHAMBER. Here's how it works. Customers remain in the warm sales room and push a button, then open a door, and right before them stand their own personal lockers. Women like this foolproof system because they do not get chilled by entering the refrigerated chamber as with the Walk-In-Type, and there are no breath-taking odors. You'll like a Salem plant too. It attracts more customers, sells more food, and has 57% less BTU. loss than the Walk-In-Type. Best of all, it operates easily since there's no defrosting necessary in the storage chamber. A Salem plant provides twice as much rentable space, and shows higher profits than other types.

NOW AVAILABLE

We can build plants under certain conditions. Write today.

WRITE FOR LITERATURE AND PRICES TODAY

SALEM ENGINEERING CO.
100 Ray St. Salem, Ohio

THERE'S THE LOCKER

Cancellation of New Plant Plans Hints Re-Conversion Near

WASHINGTON, D. C.—With the announcement by WPB that the United States now has adequate plant and machine tool facilities needed to defeat the Axis, it is learned that from \$5,000,000,000 to \$5,500,000,000 worth of contracts for construction of new factories will be reviewed with prospects of cancellation the object.

Cancellation and conversion of contracts will increase the output of war equipment, WPB officials point out, inasmuch as the labor and materials which have been thrown into construction work will be released for use in actual war production. Demands of the building program during the past three years have nearly equalled those of production, it is said. Therefore, following curtailed construction a great flow of additional manpower and materials will be directed to the manufacture of planes, guns, and tanks.

Reconversion will take place in some types of plants to meet changing military requirements. For instance, some of the light tank and arms production plants will be converted for the manufacture of airplane and ship parts, mobile artillery and tank destroyers, WPB reports. In line with this move, \$3,500,000,000 worth of shell, gun, and tank contracts have already been cancelled.

In addition, a certain amount of plant capacity now devoted to civilian production will likewise be converted to fill military orders.

This cancellation and conversion program points plainly to the fact that, since the first of 1939, the U. S. has doubled its stock of machine tools. It points also to figures which show that at the time of peak construction during 1942, three million men and 24% of the U. S. steel output were required to carry out the work.

In making public amounts of money involved, WPB states that on February 28 of this year the total value of all federally-financed new industrial facilities was \$15,100,000,000, of which about \$4,000,000,000 had been completed and almost another \$7,000,000,000 was scheduled for completion by the middle of this summer. The balance was to be finished by the end of the year.

It will be entirely possible to cancel \$5,000,000,000 of contracts however, in view of the lagging schedules on some of the factories.

Farm Suppliers Declare Materials For Repair Being Held Back

WASHINGTON, D. C.—Installation and repair of farm equipment is being held back because of delays in securing necessary parts and motors, the farm machinery and equipment suppliers industry advisory committee told WPB officials at a meeting here recently.

Protesting that work on farms cannot be delayed, the committee urged the WPB to make available pipes, pipe fittings, machinery, and motors so that milking machines, water systems, and other farm apparatus may be put into working condition at once.

New 'Guidebook' Gives Listing and Functions Of Federal Agencies

WASHINGTON, D. C.—A "Handbook of Emergency War Agencies", prepared by the Office of War Information, provides a guide to Federal agencies all of whose present functions are devoted to the war activities.

It does not include the activities of the agencies established for other purposes, even though much of their work today has been integrated with war program. The handbook is designed to help the public reach the services it needs within the emergency war agencies.

Copies of the handbook may be obtained by writing to Superintendent of Documents, Government Printing Office, Washington, D. C. Price 20 cents each.

Research Reveals Freezing Destroys Tularemia & Trichinosis Parasites

NEW YORK CITY—A recent report to the American Chemical Society states that parasitic infections in meat, impossible to discover by ordinary inspection, can be destroyed by freezing at -5° F. for 20 days.

This process of freezing at proper temperatures controls tularemia, or deer fly fever, in rabbit meat, and trichinosis in pork. After freezing, the meat is kept in cold storage until it is purchased by the consumer.

In Massachusetts, the Department of Conservation has established a quarantine of all live rabbits imported into the state, before they are liberated among other wild rabbits there, which are free from tularemia. Another regulation requires that carcasses of rabbits shipped from other states must have been kept in cold storage at a temperature of less than 30° F. for not less than 30 days before coming in.

Twenty days' freezing at -5° F. de-

stroys all trichinae in pork, but only commercial packing houses have equipment to perform such freezing operations safely. The total absence of this parasite in pork cannot be guaranteed by any other means of inspection. In order to be absolutely safe, and to make sure of the best flavor, fresh pork should be cooked until the red color of the meat has entirely disappeared. Trichinosis is usually contracted by human beings from under-cooked pork.

The U. S. Bureau of Animal Industry, as well as the state bureaus of New York and New Jersey, regard freezing of primary importance in the preparation of meat products. Although the state regulations, are now somewhat experimental, such freezing procedures, if proved to be definitely worth-while as a safeguard of public health, will be a great advance toward the ultimate control of trichinosis in the U. S.

Humidity Control Added To Amcoil Test Chamber

NEWARK, N. J.—An automatic humidity control with a range of ambient to 140° F. or 90% relative, has been developed for attachment to the low and high temperature test chamber manufactured by American Coils Co., staff engineers report.

Equipped for testing delicate and precision mechanisms, the testing chamber combines mechanical refrigeration and electric heating devices which afford a temperature range from -55° C to plus 70 degrees C (-67° F. to 160° F.).

Other features outlined by the manufacturer are the two-stage "Freon" condensing unit, positive forced air circulation that can be varied in volume, thermostatic temperature controls, sealed glass panels for observation purposes, and accessibility to the test space.

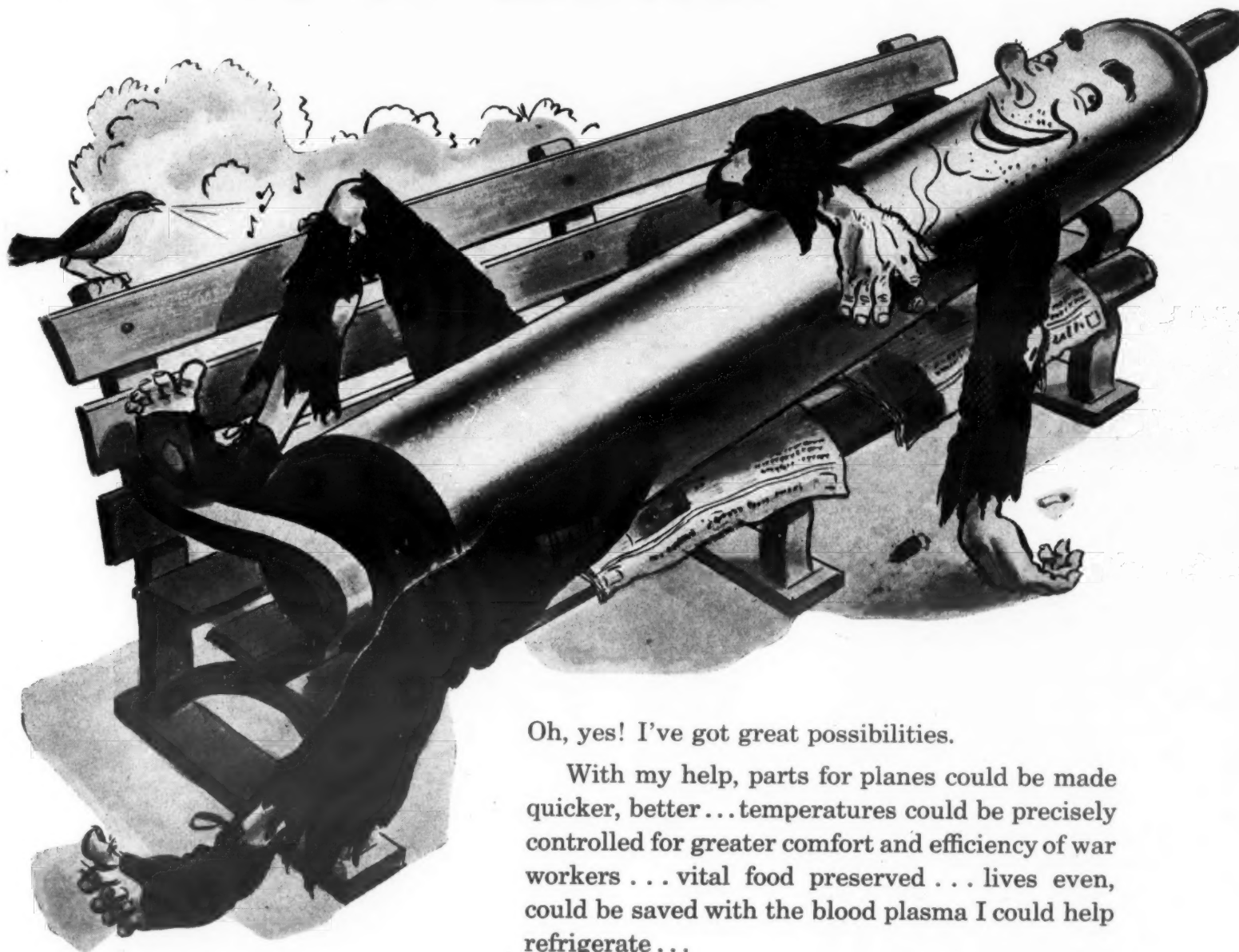
This Amcoil test chamber measures 95 inches wide, 91 inches high, and 42 inches deep.

Frank Slessar, Producer Of Units in Australia, Now Visiting the U. S.

SAN FRANCISCO—Frank Slessar, Australian manufacturer of refrigerators, and at present Flying Officer for the Royal Australian Air Force, arrived in San Francisco this month on a secret military mission. After a short visit with Clarence F. (Sandy) Prass, president of the California Refrigerator Co., Mr. Slessar left immediately for Canada.

Mr. Pratt reports that Mr. Slessar is now manufacturing reach-in and walk-in refrigerators for the Australian Government. The Kelvinator units and coils for these refrigerators are built in Australia, but the controls and expansion valves are supplied from the United States. The refrigerators are made portable by wheel-mounts. Mr. Slessar is planning an extensive tour of the Pacific Coast before returning to Australia.

YES SIR, I'M A BUM!



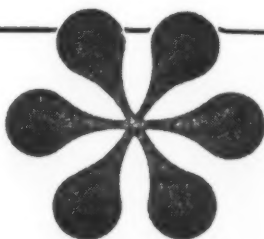
Oh, yes! I've got great possibilities.

With my help, parts for planes could be made quicker, better... temperatures could be precisely controlled for greater comfort and efficiency of war workers... vital food preserved... lives even, could be saved with the blood plasma I could help refrigerate...

But I'm not doin' nuthin. I'm just lyin' around. Just an "empty" cylinder... waitin' to rust.

So what? *

THE IDLE "FREON" CYLINDER



This is waste. No one approves of it. Least of all, those in the industry whose business life depends upon the use and sale of "Freon" refrigerants. Ferret out all unused cylinders. Give no storage room to empties. Ship idlers back for important war work to: Kinetic Chemicals, Inc., at Carney's Point, N. J.

KINETIC CHEMICALS, INC., MAKERS OF "FREON" SAFE REFRIGERANTS

"Freon" is Kinetic's registered trade mark for its fluorine refrigerants



Water Coolers, Replacing Ice Plants on Cargo Vessels, Undergo Shock Tests For 'Sea Legs'

EAST SPRINGFIELD, Mass.—Electric water coolers with "sea legs" have been developed through a series of gruelling tests at the Westinghouse plant here, so that American troops enroute overseas can have continuous supplies of good drinking water.

Test models of the coolers were subjected to conditions of shock, pitch and roll that simulated stormy sea weather, reported H. F. Hildreth, manager of the Air Conditioning & Commercial Refrigeration Department. These tests included repeated bumping with a 100-pound weight, skidding down an inclined plane and tilting at 40 degree angles.

Westinghouse is making coolers for both transport and cargo ships now being built by the United States Maritime Commission. In production at the plant now are 530 coolers for 10 new troop transports. Each will be equipped with enough units to supply

800 gallons of 50-degree water every hour.

Water will be fed to each cooler from the ship's central supply and will be chilled by a hermetically-sealed refrigeration unit, containing a compressor, condenser, and evaporator. This unit will go into operation whenever temperature of the water rises above 50° F.

Each of the transports will carry two 5-gallon coolers, 23 10-gallon coolers and 28 20-gallon coolers, rated according to the number of gallons of water they will cool in an hour, from 100° to 50°. These electric coolers will eliminate the need for a 15 to 20 ton ice plant ordinarily required to do this job, Mr. Hildreth pointed out.

To make certain that no cooler will be out of service because of mechanical failure of the refrigeration unit, "spare" sealed units will be carried to serve as replacements.

Manufacturer Is Denied Any Allocations For 9 Months For Diversion of Critical Materials

WASHINGTON, D. C.—James A. Kenny, Philadelphia, manufacturer of funeral supplies, has been penalized by the War Production Board for what the WPB in its announcement called "reckless diversion of critical war materials."

According to Suspension Order S-268, Kenny exceeded his permitted quota of iron and steel in May by 7,000 pounds, in July by 12,000 pounds and, in addition, used up 240,000 pounds of sheet steel, all in direct violation of Limitation Order L-64 which places restrictions on the manufacture of caskets. Both bronze

and copper, prohibited for this use by L-64 and Conservation Order M-9-c, also were used.

Additionally, in violation of Priorities Regulation No. 1, Kenny accepted 46,420 pounds of No. 20 gauge sheet steel when his inventory already exceeded a practicable working minimum.

Kenny is denied priority and allocation assistance for the coming nine months. During each of those months he is restricted in his use of any metal to the manufacture of not more than 100 caskets, burial vaults and shipping cases, all told.

Appliance Dealer Is Held For Violating Soldiers' Relief Act

LOS ANGELES.—For allegedly repossessing a refrigerator and washing machine in violation of the Soldiers' and Sailors' Civil Relief Act, Leo Galenson, owner of a radio shop at 8626 S. Broadway, has been arraigned on a federal complaint authorized by Commissioner David B. Head.

The complaint, first of its kind filed here, charges that Galenson repossessed the articles from the wife of Arthur J. Farrell, Colton, after he enlisted in the Navy. The relief act gives servicemen six months after their discharge to pay off time-payment debts incurred before going into service.

Galenson's bail was fixed at \$1,000.

W. J. Logan Heads WPB Distribution Bureau

WASHINGTON, D. C.—J. A. Krug, Program Vice Chairman for WPB, has announced the appointment of W. John Logan, Director of the Compliance Division, as Director of the Distribution Bureau.

The Bureau is responsible for the issuance of special and emergency priority ratings, maintenance of control records, and provisions for internal adherence to the policies established by the Program Vice Chairman regarding priorities and allocations. The Bureau also includes the Compliance Division and the Canadian Division.

Mr. Logan succeeds B. C. Heacock, who will return to his post as chairman of the Executive Committee of the Caterpillar Tractor Co. in Peoria.

ASH&VE Semi-Annual Meeting Will Be Held June 7-8 at William Penn In Pittsburgh

PITTSBURGH — The Pittsburgh chapter of the American Society of Heating and Ventilating Engineers will act as hosts for the semi-annual meeting to be held at the William Penn hotel, June 7 and 8.

The Council and Committee on Research plan to meet in advance of the general sessions and during the two-day conference four technical sessions will be held. The meeting will be called to order by President M. F. Blankin, Philadelphia, Pa., on Monday June 7 and the subjects selected by the Meetings Committee will bring out a number of discussions on topics of immediate current interest, as well as research results that have been developed under the cooperative program sponsored by the Society in various colleges and universities.

The customary entertainment features are being omitted and the only important social function will be the semi-annual dinner June 8 at which the principal speaker will be Dr. Allen A. Stockdale whose subject is "Democracy Can Do It."

ADVANCE PROGRAM SEMI-ANNUAL MEETING AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS

Sunday, June 6

1 p.m. Registration (Silver Room).
1:30 p.m. Council Meeting (Forum Room).
7:30 p.m. Committee on Research (Parlors E and F).

Monday, June 7

9 a.m. Registration (Silver Room).
9:30 a.m. TECHNICAL SESSION (Urban Room).
Reports of Officers.
Amendments to By-Laws.
"Performance of a Residential Panel Heating System," by H. F. Randolph and J. B. Wallace.

"Operation of a Heating Plant Using Sun Energy and Radiant Heating," by W. C. Knopf, Jr.

2 p.m. TECHNICAL SESSION (Urban Room).

"Final Values of the Interaction Constant for Moist Air," by John A. Goff, J. R. Andersen and S. Gratch.

"Study of Actual vs. Predicted Cooling Load on an Air Conditioning System," by J. N. Livermore.

"Spray Nozzle Performance in a Cooling Tower," by L. M. K. Boelter and S. Hori.

3 p.m. Ladies Tea.

5 p.m. Chapter Delegates Conference.

7:30 p.m. Committee Meetings.

8 p.m. Nominating Committee Meeting.

Tuesday, June 8

9:30 a.m. TECHNICAL SESSION (Urban Room).

"Use of the Down Draft Coking Principles for Smokeless Combustion," by J. R. Fellows and J. C. Miles.

"Field Study of Comfort Reactions of Apartment Dwellers Under Fuel Oil Rationing," by Sallye Hamilton.

"Heat Transmission Through Insulation as Affected by Orientation of Wall," by F. B. Rowley.

"Graphical Method of Calculating Heat Losses," by P. D. Close.

11 a.m. Ladies Breakfast-Bridge.

2 p.m. TECHNICAL SESSION (Urban Room).

"The Economic Factors in Converting Recirculated Air for Ventilation," by H. E. Ziel and Henry Sleik.

"Panel Discussion—Will Current Ventilating System Operation Undermine Public Health and Efficiency?"
7 p.m. Dinner (Urban Room).

Speaker: Dr. Allen Stockdale, Subject: "Democracy Can Do It."

Presentations: Past President's Emblem and Memory Book to Prof. E. O. Eastwood.

G-E Motor Division Adds To Line of Enclosed Models

SCHENECTADY, N. Y.—A new line of totally enclosed motors, the most recent addition to the widely known group of "Tri-Clad" motors, has been introduced by the Motor division of General Electric.

Available in both the polyphase, 60-cycle, induction type and the single-phase, 60-cycle, capacitor type, the new motors are especially designed for use under conditions where abrasives, chemicals, rain, snow, and excessive dirt are encountered.

The polyphase motors are furnished in frame sizes 203 to 225. They include ½, ¾, and 1 hp. at 900 rpm; ¾, 1, and 1½ hp. at 1,200 rpm; 1, 1½, and 2 hp. at 1,800 rpm; and 1½ and 2 hp. at 3,600 rpm. The single-phase motors are furnished in frame sizes 203 and 204, and include ¾ hp. at 1,200 rpm; 1 and 1½ hp. at 1,800 rpm; and 1½ and 2 hp. at 3,600 rpm. The mounting dimensions of these motors are interchangeable with Tri-Clad open motors of the same rating.

These new motors have all the important basic features of the Tri-Clad group. This includes triple protection—protection against physical damage, electrical breakdown, and against normal operating wear and tear.

In addition, all parts of the motor enclosures—frame, end shields, and conduit boxes—are cast iron.

General Controls Co. Names Claude Slocum Western Factory Rep.

GLENDAL, Calif.—Claude S. Slocum has been appointed factory representative for General Controls Co., manufacturers of pressure, temperature and flow controls, with headquarters at 2135 S. Adams St., Denver, Colo.

Slocum will cover the Rocky Mountain, Kansas City, Mo., Texas panhandle, and northern New Mexico territory.

He has been with General Controls Co. for the past three years as Colorado distributor. Previously Slocum was service manager for Tidmore Engineering Co. of Tucson, Ariz. and later partner in the company of Means & Slocum, warm air heating experts.

Buffalo Forge Makes \$243,809 In Quarter

BUFFALO, N. Y.—Buffalo Forge Co. and subsidiaries reported net profit of \$243,809, equal to 75 cents a common share, for the quarter ended Feb. 28. The profit is subject to audit and renegotiating provisions, but after federal income and excess profits taxes and a provision of \$175,000 for wartime contingencies.

- 90° F. Army Climatic Research Chamber Tests Field Equipment For 'Coldest Spots'

LAWRENCE, Mass.—The problem of testing field equipment for cold climates has been solved at the Army's Climatic Research Laboratory here, where the cold chamber is said to be the coldest spot in the world.

The research as to the efficiency of Arctic gear is carried on usually at a temperature of -55° F. But the cold room can be lowered to -90° F.

Twenty soldier-volunteers, selected from a group of 75, and working in shifts of four, spend six hours each in "round-the-clock" tests in the refrigerated chamber.

The effectiveness of a double sleeping bag is tested at various tempera-

tures after the soldier "guinea-pig" slips into a two-piece sleeping garment and attaches a thermo-couple harness to various parts of his body. The thermo apparatus records body temperature at half-hour intervals on a control board outside the low temperature chamber.

Daytime, as well as sleeping gear is tested. The soldiers climb in 15 pounds of fur, with a camouflaged white poplin outside this again, and spend their time exercising on a treadmill or moving about the room. Already the tests are said to have increased by 50% the efficiency of Arctic clothing.

A NEW Flaring Tool SEES THE LIGHT OF DAY

• In the new Imperial Self-Clamping Flaring Tool you spread the bar and insert the tubing in the proper opening. Then you close the bar, slide yoke onto hinged end of bar. Then just make the flare. The yoke itself does the clamping.



• "Mac" McIntosh (at the right), Chief Engineer, and George Franck, Research Engineer of the Imperial Brass Mfg. Co. discuss the new Imperial Flaring Tool that will still further simplify the job of making a flare.

ALTHOUGH the men in the Imperial organization are giving most of their time these days to the problems of applying fittings and other Imperial Products to various types of war equipment, you can be sure they are still thinking about the problems of the refrigeration field.

Quite recently "Mac" McIntosh and George Franck helped in the development of a simple, but important, improvement for an Imperial Flaring Tool to make it self clamping. In this tool there are no nuts, levers or other devices to be tightened for clamping

the tubing. It is easier and faster to operate than the previous style of tool.

We can't promise that you will be able to get one of these tools very soon but we do want you to know that Imperial research is being continued on all Imperial Products. When the critical material situation begins to clear up you will have new and improved Imperial Products to use in your work.

THE IMPERIAL BRASS MFG. CO., 565 South Racine Avenue, Chicago, Illinois

IMPERIAL Refrigeration Products

STRAINERS • DEHYDRATORS • VALVES • FITTINGS • FLOATS • CHARGING LINES
TOOLS FOR CUTTING, FLARING, BENDING, COILING, PINCH-OFF AND SWEDGING

N. Y. 'Guild' Seeks Action on Service

Groups In Other Cities Are Urged To Make Same Kind of Survey

NEW YORK CITY—To head off an impending breakdown of the refrigeration servicing industry by bringing more pressure to bear on local draft boards to slow up the heavy drain of men from the refrigeration service field, the Refrigeration and Air Conditioning Guild, a greater New York organization of refrigeration servicing companies, urges that similar groups be formed throughout the country to impress Selective Service with the facts seriously menacing public health.

Refrigeration service companies are being stripped of their experienced men by Selective Service and are not being given the deferments which are necessary to keep the nation's refrigerators in operating condition, the Guild asserts. The War Production Board, it declares, must use its influence with Selective Service to bring about a radically different treatment of service men in view of their vital importance in relation to preservation of food for the duration.

PROCEDURE SUGGESTED

Only by reinforcing its numbers can the refrigeration servicing industry hope to make a strong campaign for the consideration it deserves, T. A. Reina, president of the New York Guild, emphasizes. He urges that groups be organized all over the country to present their problems with the necessary weight to hasten a change in the methods used by Selective Service. He would like to see the industry make a concerted effort to assure adequate protection of the food stored in the nation's millions of mechanical refrigerators.

Every servicing company in greater New York has been sent the following questionnaire by the Guild in its initial step to organize a definite program of action.

So far, Reina says, only feeble sporadic attempts have been made to bring to light the dominating importance of the food preservation problem, but he believes that by organized nation-wide use of this questionnaire the industry can quickly develop an effective tool with which to approach Selective Service. In issuing the questionnaire, Reina offers his cooperation to any group. He may be reached at 4018 Church Ave., Brooklyn, N. Y.

NO REPLACEMENTS

"The refrigeration servicing situation is rapidly getting out of control. Even now, the dullest season of the year as far as service calls are concerned, many service companies are from one to two weeks behind in answering calls. Millions of dollars worth of food is being spoiled—food which, under the point rationing system, cannot be replaced," Reina points out.

Men are needed for the armed forces, of course, he goes on to say but, "The refrigeration servicing industry as a whole is not being given the consideration it deserves in its vital position on the home front. Most of the service companies are so undermanned as to constitute a danger to public health. Not only are experienced men being taken, but no provision is being made for the training of new men or boys. For as fast as they are trained, they are snatched either into war industries or the armed forces."

TYPE OF QUESTIONNAIRE USED BY N. Y. SERVICE GROUP

1. What proportion of your business is in the following classification:
 ESSENTIAL, such as:
 Hospitals War Plants
 Schools Hotels
 Meat Markets Ships
 Food Supply Markets Homes, Apartments
 NON-ESSENTIAL, such as:
 Beer Halls Pool Rooms
2. A. What character of specialized training do your men possess?.....
 B. What length of time is needed to train new men?.....
3. A. Have you encountered a shortage of men in your business?.....
 B. How many employees do you need to carry on your business?.....
 C. How many employees have already been inducted into service?.....
 D. Have you made an effort to replace your employees?.....
4. How many days are you behind on service calls?.....
5. What percentage of calls received each day go unanswered?.....
6. From your personal knowledge, do you know of meat and food-stuffs having been spoiled for lack of proper refrigeration? If so give approximate amount.....
7. Approximately how many household refrigerators do you service per year?..... How many commercial units?.....
8. What percentage of increase in calls do you expect during the months from June to November?.....

Novel 'Tool Buggy' Eliminates Waste Motion and Customer Complaints

Old Tubing, Casters and Canvas Make a Conveyance

MONTGOMERY, Ala.—There are no housewives calling up to complain that "your serviceman got grease all over my kitchen" or no instances of unprofitable wasted time on service calls at Renaud Frigidaire Service Co. here—since Paul Renaud, manager, invented a simple "tool buggy" which put an end to them.

Surveying the reasons for unprofitable lost time and loss of customers in the past, Renaud found that almost every housewife hates to call a mechanic into her kitchen for fear he will soil it in the repair process. At the same time, mechanics forgetting tools or wasting minutes "running out to the car" for them was cutting down on the number of customers serviced per day.

Both problems were eliminated with the "tool buggy." This is a small structure of half-inch discarded metal tubing, mounted on casters attached to four legs. The top sits two feet off the floor, and it is about four feet long. Stretched between the two pipe sides of the dolly is a square section of canvas, loose enough to hang down in the middle, and open at both ends. It folds up neatly.

Servicemen fill the buggy with tools, close it compactly, and place it in their cars. When it is rolled out of the car and into the home, a canvas apron, four feet long, lets down from one side, on which to lay tools while working. All grease or dirt accumulates on this apron and the canvas is detachable for cleaning.

PENN ADVERTISES TO SUPPORT THE INDUSTRY

The critical importance of the Refrigeration Service Man's job has not been fully recognized in many important quarters. The full page advertisement reprinted here is from the May 1st issue of Business Week. It is another gun in Penn's consistent campaign in Fortune, Time and Business Week designed to awaken influential people to the vital importance of your business.

GUARDIAN OF THE PUBLIC HEALTH

Billions of invisible enemies—the bacteria which attack fresh foods—threaten civilians and fighters alike. Bulwark against these foes is refrigeration—controlled "cold" which holds food temperatures below the point at which microbes spawn disease and decay.

Vital to efficient functioning of all "cold-making" machines is the Refrigeration Service Engineer. His technical training and his years of practical experience are essential to the continued operation of refrigeration equipment, in warehouses and stores, on trains, trucks and ships, in restaurants, institutions and homes—wherever fresh foods are stored, transported or served! His knowledge and abilities are mobilized for Victory.

Penn salutes the Refrigeration Service Man for his ingenuity and skill in



making existing equipment carry a heavier load than ever before... for his care in conserving materials... and for his energy and loyalty as a soldier on the home front, protecting public health, preventing spoilage and waste of our critical supplies of food. While our facilities must be devoted in large measure to direct war production, we are doing our best to supply him with the necessary automatic refrigeration controls to maintain this vitally important service. Penn Electric Switch Co., Gosben, Indiana.

PENN

AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS

"DAY & NIGHT"

A Complete line of Storage Type Water Coolers in accordance with Latest W. P. B. Regulations

DRINKING FOUNTAINS

NAVY-2 Models ARMY-NAVY-2 Models for Shipboard use for land use

CAFETERIA TYPE COOLERS

ARMY-NAVY 2 Models for Mess Halls

INSULATED STORAGE TANK TYPES 6 Models for Bakery Service • 3 Models for Film Processing •

DAY NIGHT WRITE FOR LATEST DATA

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If New Tire Quota is Exhausted, Operator Can Get Used Ones

WASHINGTON, D. C.—An eligible truck operator who is unable to get rationing certificates for new tires because his War Price and Rationing Board has exhausted its quota can obtain certificates for used tires instead.

This was announced May 12 by the Office of Price Administration, which has authorized local boards to issue used truck tire certificates without regard to quota restrictions. Previously, all certificates for truck tires were charged against quota.

In making the announcement, OPA emphasized that replacements, whether new or used, still can go only to vehicles included in List A in the tire rationing regulations.

Certificates for used truck tires will be issued only when the local board is assured by the applicant that the needed tires are available. Since stocks of used truck tires in trade channels are relatively small and spotty, it was explained, there is no point in issuing a certificate unless it can be used to buy a tire.

Procedure for getting a used tire is the same as for new tires. First an OPA inspector must recommend a replacement, which he will not do if the tire on the wheel can be made serviceable by recapping. But if a replacement is recommended, the applicant then goes to his local board, which, if it determines he is eligible, issues the necessary rationing certificate.

Army Moving Vans Converted To 'Portable Hospitals' By Cooling

LOS ANGELES—The story of how air conditioning was called upon to help solve problems involved in desert warfare was told recently by G. E. Weiss of Gay Engineering Corp., Los Angeles air conditioning dealer.

During desert maneuvers in sub-tropic heat, with temperatures inside armored vehicles soaring 120 to 130° F., U. S. Army officers were faced with the problem of severe heat prostration calling for medical treatment for the troops "on the spot" in order to obviate the possibility of fatalities, Mr. Weiss relates.

Considering the plausibility of using refrigerated trucks as "portable hospitals," it was found that such trucks were not available in less than six to eight weeks time and a truck body building firm estimated that it would take from three to four weeks to alter available standard Army moving van trailers for the particular purpose.

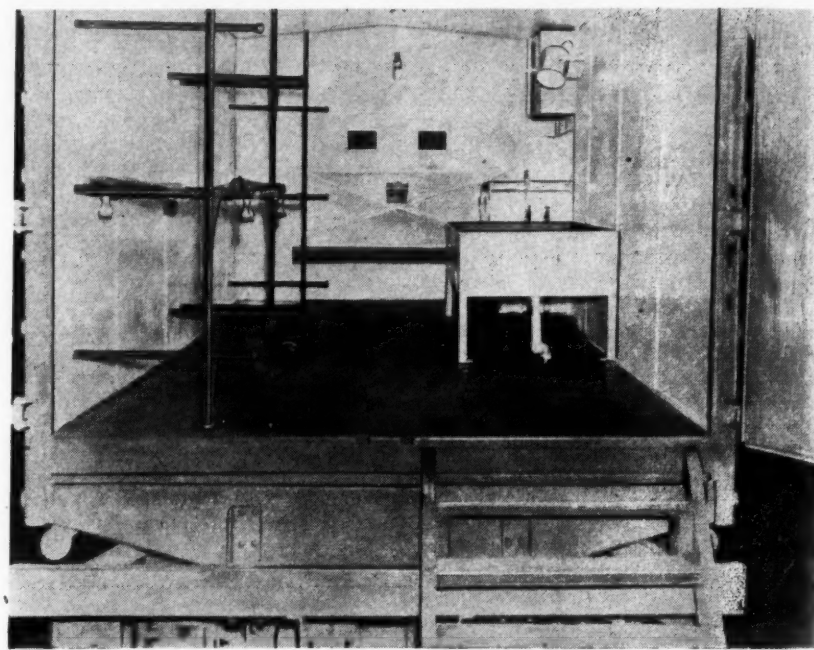
As a last resort, the two available Army moving vans were brought to the dealer's yard. Carrier truck refrigeration units were installed, and the vans were back on the road in five days. The work entailed included removal of the roof to allow for insulation; raising the walls and providing complete insulation for all sections of each of the two trailers, including walls, roof and floor, and also constructing two complete insulated steel refrigeration doors for the back section.

A complete Carrier truck refrigeration unit was installed in each of the vans, with the compressor suspended underneath the chassis. In addition to serving the air conditioning system, the refrigerating unit supplies chilled water to a storage tank used in treatment of heat prostration.

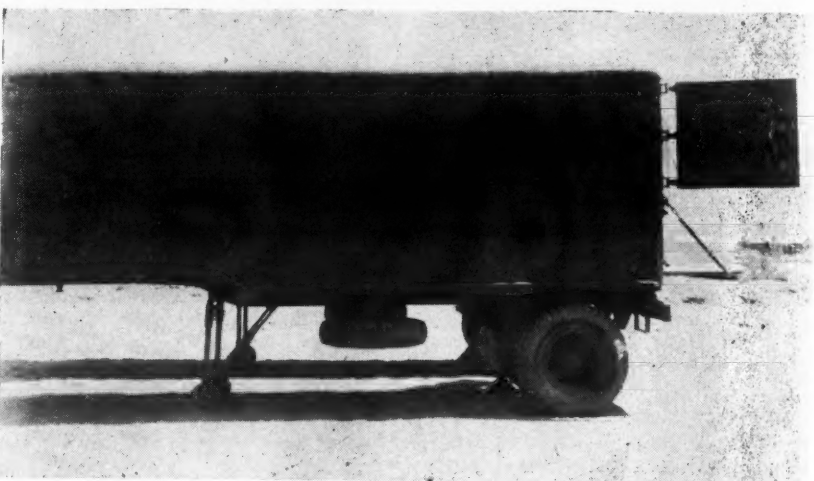
The duty of the refrigeration system was, first, to maintain a temperature within the trailers of not in excess of 68°, and second, to maintain a water temperature in a tank containing 150 gallons of not in excess of 40°. In addition to the refrigerating and air conditioning system, each of the trailers was equipped with a surgical cabinet and copper sink with water connections and drain, a sheet metal tub of sufficient size to completely immerse an entire man, steel stretcher supports to accommodate six stretchers, and a special spot light for their use in the performance of any surgical work that might be required.

In use by the Army Medical Corps as portable air conditioned receiving stations in which to treat men in the field suffering from heat stroke and heat exhaustion, the units quickly proved their worth.

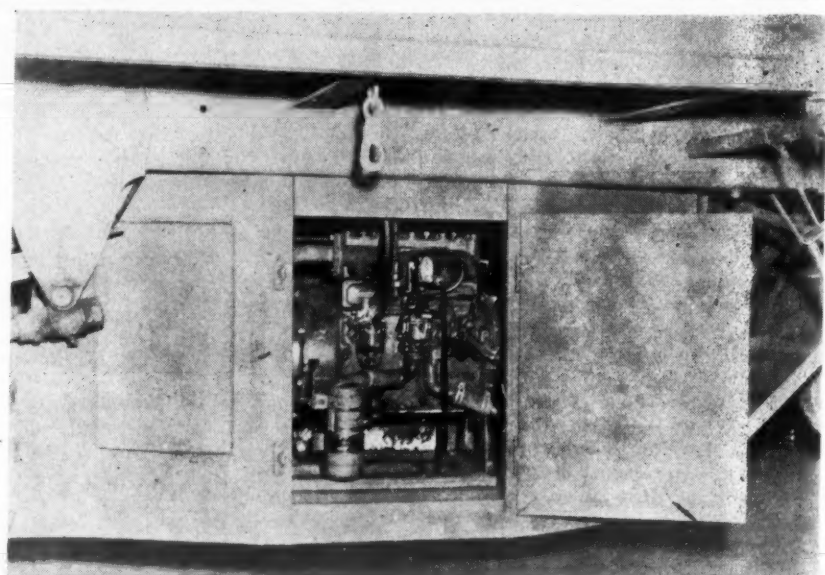
A letter from the Major General in command of the training center stated: "The workmanlike construction of the remodeling and installation of the equipment are excellent in every detail and the two units have been placed in immediate service and are rapidly proving their value."



After conversion which took only five days, Army moving vans, with insulated walls and roof have become "portable hospital trailers." Air conditioned to desired temperature conditions even when on duty in the desert sun, each trailer is equipped with accommodations for six stretchers and a storage unit for cold water used in treatment of heat prostration.



A view of one of two Army moving vans before its conversion into a mobile receiving station for treating men in the field suffering from heat stroke and heat exhaustion during desert maneuvers.



The refrigerating and air conditioning unit is located below the floor, permitting all of the floor space of the trailer to be available for hospital services. Totally enclosed for protection against the sands, the equipment maintains desired temperatures within the "hospital" and provides the chilled water required for treatment in heat prostrations.

A wartime selling aid for Westinghouse Contractors

This advertisement is one of a series appearing in leading national publications including Time, Business Week, U. S. News and Industrial and trade publications. This program of more than 10½ million sales messages is a potent force to help Contractors sell Westinghouse Air Conditioning and Industrial Refrigeration for vital war needs.

A JAB AT THE JAP OFF NEW GUINEA

The above picture shows U.S. Naval Units attacking a Japanese flotilla. Fletcher Pratt, noted naval authority, helped us prepare it.

The glorious success of our Navy is due in no small part to precision weapons and equipment. Much of this material is made, and much more influenced, by Westinghouse. For example, Westinghouse Air Conditioning and Industrial Refrigeration, by controlling conditions of atmosphere and process materials, contribute to precision, uniformity and volume production of countless war essentials.

When the war is won, a "thousand" new-day benefits will result from Westinghouse "Conditioning". Better products at lower cost, greater year 'round comfort and convenience—better living for all.

Back of Westinghouse skill in solving varied "conditioning" problems are years of experience—also a hermetically-sealed compressor which assures economy, dependability—long life. Inquiries are invited from producers of war materials and from postwar planners. Westinghouse Electric & Mfg. Co., 677 Page Blvd., Springfield, Mass.

<p>SMACK ON A FLAT TOP. Bomb sights are manufactured under controlled air conditions for perfect fitting of delicate mechanical and optical parts and for protection against perspiration and dust.</p>	<p>GLASS EYES FOR SUBS. In the manufacture of U. S. submarine periscopes, rejects are reduced—production speeded by protecting vital parts against dust and moisture with air conditioning.</p>
<p>FULL SPEED AHEAD. Matched sets of huge propulsion gears for warships must fit perfectly. For the extreme precision required, room temperatures are held constant by air conditioning through the entire operation of several days.</p>	<p>BETTER SIGHT—BETTER FIGHT. In grinding lenses and in assembly of binoculars, air conditioning reduces rejects—speeds production by controlling temperature, humidity and air cleanliness.</p>

Tune in John Charles Thomas, NBC, Sunday at 2:30 P.M., E.W.T.

Westinghouse Air Conditioning
GEARED TO A THOUSAND WARTIME NEEDS

See Need For Even Greater Metals Production To Match Consumer Goods Demand After War

WASHINGTON, D. C.—Greater number of man-hours per unit of raw material is required in war time for the manufacture of durable goods than was needed in peace time the Commerce Department said recently in regard to the post-war conversion of industry.

War industries needed on the average last year, the department stated, 133 man-hours to fabricate a ton of steel into guns, tanks, machine tools, and other steel products as against 85 man-hours needed in 1939 for the fabrication of steel products. This is partly due to less efficient labor because of the influx of untrained workers.

The durable goods manufactured after victory is won will again be chiefly non-military. This means that if the metal processing industries should continue to work at top speed to repair the destruction caused by the war, the department continued, they would need far more raw material than the iron and steel industries

could supply with its expected capacity of 97,000,000 tons as of December next.

Either the iron and steel capacity would have to be expanded or the metal fabricating industries must shrink to its level, throwing many out of work, the department concluded.

CORDLEY
Electric
WATER COOLERS
ALL SIZES FOR
SHIPBOARD AND LAND USE
MEET GOVT. SPECS.

CORDLEY & HAYES, NEW YORK, N. Y.

'Refrigerator Room' in Center of Aircraft Plant Keeps Aluminum Parts 'Ready'

Special Construction of Door Is Feature Of -20° F. Chamber

DETROIT—Important savings in time in the handling of vital airframe parts for bomber-type aircraft have been effected by the installation of a large refrigerated storage room in the aircraft division of the Hudson Motor Car Co. here.

The airframe parts constructed of an aluminum alloy must be maintained within a range of very low temperatures following heat treatment. They are then in what metallurgists term a "soft" condition, required while they are being worked into bomber fuselage sections and wings.

If not thus protected, the parts become too hard to be worked and require another 16 to 24 hours to go through the process of re-heat treating. The savings in time and material through protection afforded by the refrigerator room thus are manifest.

Additional savings in time stem from the fact that use of the room makes practical the running of much larger quantities of parts at one time through heat treating.

HOW BOX IS BUILT

The cork insulated refrigerator "room" is in fact a big box, 18 feet long by 14 feet wide and 10 feet high, with 11-inch walls. It has been carefully "spotted" in the center of the factory, between the bomber fuselage section and the Curtiss-Wright "Helldiver" bomber wing production. It supplants the many smaller boxes formerly used in individual departments of the plant.

Temperature in the room is held at about -20° F. The parts are placed on shelves after being brought from the heat treating department.

Workmen are able to take the parts out one at a time as needed, without entering the room, by use of small shoulder high doors on the side. Each door bears a list of the parts within reach, so the box need be opened no longer than is necessary for quick selection of the proper part. A large door at the end permits entry with big parts.

DETERMINING THE LOAD

The installation was made by representatives of the York Ice Machinery Corp. The refrigeration load was determined by calculating the heat loss through the 8 inches of cork insulation with the temperature differential between the factory temperature of 95° F. and the inside box condition of -20° F.; the pounds of aluminum per hour which enter the storage chamber; the temperature of the aluminum entering the chamber, and the specific heat of the aluminum. Also taken into account were the air changes brought about by the opening and closing of the door.

A 10-hp. condensing unit supplies refrigeration through blower-type units in the cooler. The blower unit is a York LV model especially designed for low temperature work, with manually operated water defrost once daily.

The blower fans run continuously, with the exception that by means of a switch on the door they shut off whenever the door is opened, thus preventing excessive losses in refrigeration.

Temperature control is through a thermostat in the box. Refrigerant control is by means of a thermostatic expansion valve.

A feature of the box construction is the use of vestibule-type door design, with batten doors on the inside.



Margaret Disko of the Aircraft Division of Hudson Motor Car Co., wearing a woman war worker costume of her own design, is aided in the selection of material from the "refrigerator room" by Henry Keller, who is custodian of the big box. Miss Disko's job is numbering of wing parts.

Copper and Zinc Use In Plumbing Fixtures Is Further Reduced

WASHINGTON, D. C. — Further savings in such critical materials as copper, copper base alloy and zinc used in the manufacture of plumbing fixture fittings and trim were ordered May 6 by WPB.

The action was effected through issuance of Schedule V, as amended, of Limitation Order L-42. The amended schedule is a consolidation of the original Schedule V and Schedule V-a.

Under the amended schedule, no copper or copper base alloy shall be used in the manufacture of any fittings or trim except for limited amounts in twenty-four items specified on List A. The copper content of several of these items is reduced from that permitted in the original schedule, with the result that a saving of more than 600,000 pounds of copper a quarter is expected.

The bulk of these savings will be made in the manufacture of flushometer valves, automatic high tanks supply valves, wash fountain trim and ball cocks.

Other than for coating, no zinc is to be used except for the manufacture of items specified in List B, which includes clean-out plugs, escutcheon holders, flush tank trip lever assemblies, nuts and spuds or inserts.

No metal shall be used in the manufacture of items specified in List C, which includes overflow pipes for flush valves, floats (except for spuds), flush balls, (except for spuds and inserts), pop-up wastes, trip lever wastes or other mechanical waste assemblies and escutcheons.

A general exception from the restrictions of the schedule is made for products manufactured for laboratories, food packing establishments, hospitals, aircraft and ships where conditions require the use of the restricted materials. The schedule becomes effective July 5, 1943. This period of grace will permit manufacturers to complete work now in progress.

New Kramer Coil Line Meets Limitations

TRENTON, N. J.—A new line of commercial cooling units featuring hot galvanized coils to comply with government limitations on critical materials is announced by Kramer Trenton Co., manufacturers of coils, radiators, and devices for cooling and heating.

To facilitate quick delivery, Kramer's new line has been cut to seven models, all of which are designed for both 110-volt, 60-cycle and 220-volt, 60-cycle operation and can be used with Freon, methyl, sulphur, ammonia, or brine.

Known as the Victory Coolmaster line, features claimed include accurate ratings, no welded or soldered return bends, one-man suspension brackets for easier mounting, heat interchanger furnished with each unit, and balanced fans built for endurance. The fans, in proportion to unit size, run from 12 to 20 inches in diameter.

Refrigeration and Air Conditioning As a War Production Tool

By L. W. Clifford, Sales Development Section Supervisor, Westinghouse Electric & Mfg. Co., East Springfield, Mass.

Crane Cab Conditioning

Due to the natural tendency of heat to rise, the temperatures encountered at the crane cab level in industrial plants are often excessively high. This is particularly true in foundries or forge shops where the work floor has a number of metal melting furnaces.

In such buildings the crane cab temperatures may exceed 120° F. and this condition, together with the presence in the air of obnoxious gas fumes such as sulphur dioxide, subject the crane operator to an extremely hazardous atmosphere.

To obtain the necessary relief for the crane operator, air conditioning of the crane cab has been provided in a number of cases.

The first step is, of course, to completely enclose and insulate the cab. To preclude the possibility of obstructing the vision of the operator, the walls of the cab are glassed in

from a height of approximately 40 inches above the floor level to the level of the cab roof. The balance of the cab walls, and the floor and ceiling can be insulated.

The cooling and dehumidification is provided by a condensing unit which may be mounted on brackets on the external wall of the cab or on the crane girders. The coil and fan may be mounted in the ceiling of the cab or in a special compartment in the wall of the cab.

The filters used are invariably supplemented by some type of chemical absorber units such as Dorex absorber canisters, in order that the air supplied to the cab will be decontaminated.

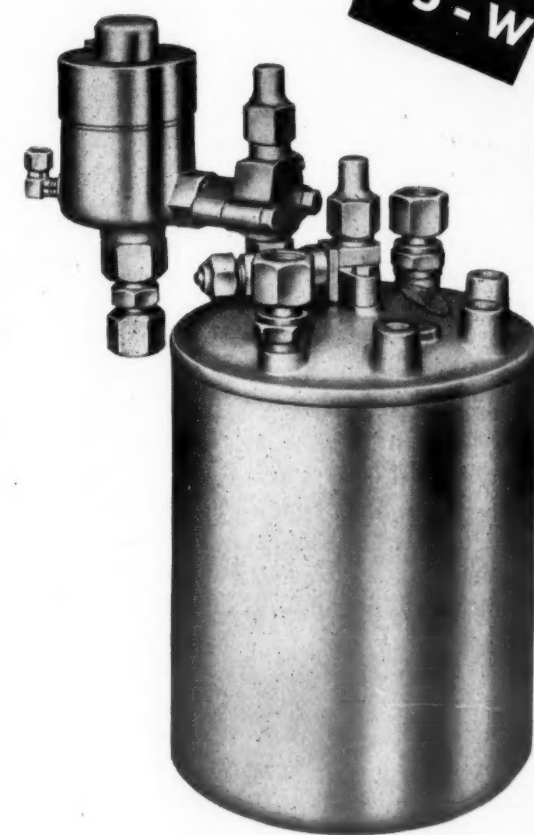
At a New England plant, a unit, with auxiliary equipment, is being used to maintain improved working conditions in the crane cab in the forge shop where a battery of oil-fired furnaces create unusually severe conditions of heat and gas laden air.

Temprite INSTANTANEOUS LIQUID Coolers

TYPICAL EXAMPLES OF WAR INDUSTRY APPLICATIONS ARE THE COOLING OF—

- 1 Water for aluminum alloy quenching baths, spot welder tips, war plant cafeterias and food processing.
- 2 Light oils for machine tools, tool tempering baths, food processing, etc.
- 3 Alcohol for aluminum alloy rivet and casting quenching baths, control testing installations, etc.
- 4 Brines for low temperature baths for age treatment of steel, low temperature circulating systems.
- 5 Acids and caustics for metal treating and cleaning baths, laboratory and testing work, etc.

★ ★ ★ ★
Temprite coolers are playing an extremely important part on the Industrial War Front. New applications for improving and increasing production on important war industry operations are being found every day for Temprite coolers.



Model: 55-W medium size industrial cooler. Capacity 90 gallons per hour.

Dealers

Temprite liquid coolers are available for dealers and distributors on authorized orders and orders direct from our armed forces. Write our sales department today for complete details.

TEMPRITE coolers are famous for their high operating efficiency and accurate temperature control. These features result from the basic patented design which permits submerging the cooling coils directly in the liquid refrigerant, together with the use of the Temprite sensitive control valve.

TEMPRITE PRODUCTS CORP.

Originators of Instantaneous



Liquid Cooling Devices

43 PIQUETTE AVENUE

DETROIT, MICHIGAN

PURO ELECTRIC WATER COOLERS

Different models available for the various requirements of government agencies and war production plants.

PURO FILTER CORP.
440 Lafayette St., New York

DRINKING WATER SPECIALISTS FOR 40 YEARS.

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That Post-War Refrigerator

TWO schools of thought regarding the postwar household refrigerator hold sway at present, and they are as far apart in their thinking as Senators Ball and Wheeler.

One, the "sack-of-potatoes" school, holds that refrigerators have become a commodity, like bread or potatoes. Proceeding from that premise, this school deduces that refrigerators should look and act like the 1942 models, that they should be sold for less money, and that distribution expense can be cut to the bone. They believe that the business will "settle down."

This school has a good deal of experience behind it. Advocates of the "sack-of-potatoes" type of thinking substantiate their thesis with graphs and statistics covering the history of other household appliances through the "developmental," "promotional," "volume - and - profit," and "standard commodity" stages. They believe that refrigerators have gone through the first three phases, are now at the beginning of the final phase.

Competition thus would develop largely along cost lines—first cost, cost of operation, cost of amortization (length of useful life).

Protagonists of this school point toward abortive efforts made in the past to make striking changes in the appearance of the household refrigerator. Considerable money has been poured down this drain by manufacturers who attempted to get the jump on their rivals with radical styling, colors, and interior arrangement.

Experience would indicate that the American housewife wants any old color so long as it's white, and any old refrigerator so long as it looks like the refrigerators she's accustomed to, both inside and out. She may like her hat to look crazy, but not her refrigerator.

The "pipe-dream" school is busy with clear plastic doors, cylindrical designs with revolving shelves, cabi-

They'll Do
It Every
Time
By
Jimmy
Hatlo



nets with drawers instead of shelves, and every conceivable permutation of the species.

Adherents of this school are often likely to be manufacturers who weren't in the business before, but sense that it will be a "good thing" after the war. Such novitiates believe that the only way they can push into this rather tightly-held industry is to come up with something new.

Even the "sack-of-potatoes" school, however, expects conservative use of plastics and light metals. Savings in manufacturing can be effected by making use of molded plastics instead of lacquered steel; and savings in shipping costs can result from reducing the weight of the box.

Also, nearly everyone concedes that there will be increased attention paid to low-temperature food storage. After long indifference to quick-frozen foods, and home freezing and storage, the public has suddenly awakened to such possibilities with a rush which has cleaned out the country's supply of used ice cream cabinets and other low-temperature storage boxes.

Those with locker storage or "deep freeze" capacity are now the envy of their meat-rationed neighbors. Thousands of home owners with such facilities are planning to freeze and store produce from their Victory gardens this summer.

Cognizant of this trend, manufacturers will undoubtedly incorporate more substantial low-temperature storage capacity in their 1947 models. This, in turn, will postulate larger refrigerators than were heretofore generally popular.

Food-shortage consciousness has given American housewives a new appreciation of the household refrigerator's importance in recent months, and the great majority of them apparently wish they owned larger refrigerators. Particularly is this true of women who hold down war jobs (either paid or voluntary) and hence have little time for shopping. With adequate refrigeration at home they can shop once a week.

Also, if food spoils now, it is a calamity.

Whatever the form it may take, it seems assured that the postwar housewife will welcome its appearance with rejoicing, and with a greater appreciation than she ever had before of the essential position it occupies in her home.

LETTERS

IS BIG BUSINESS REALLY AN OGRE?

Stewart Ice Machine Co.
1046 East Twenty-Second Street
Los Angeles, Calif.

Editor:

In reading your column "Inside Dope" I came across this quotation: "Only a small percentage of the American people are Crooks." You could have added that 99.9% of them are connected with big business management.

M. L. Stewart

(Answer)

Dear Mr. Stewart:

I am a small business man myself, and occasionally have tough competition from some of the biggest publishing houses in the world. Yet I can't go along with you at all on your statement that 99.9% of America's crooks are connected with big business. Where did you get this phobia, anyway?

Editor

Stewart Ice Machine Co.
1046 East Twenty-Second Street
Los Angeles, Calif.

Editor:

Some people can eat like a horse and still they are skinny. They seem never to get anything out of the food. Others can read the current events in the daily newspapers and never see a darned thing but Micky Mouse.

Where did I get this phobia, if I have it? Well, I got it where every other person who honestly appraises the trend of events as they are reflected in the news of the day... the columns of the Newspapers.

Quoting from Drew Pearson's column, "Washington Merry Go Round" of this date, he says regarding the French association of Taxpayers in North Africa, he says: "This is a reactionary lobbying organization with not as much standing as the National Association of Manufacturers in the United States, but with the same general aim of reducing taxes to big business and keeping power in the hands of the ruling families. End quote."

A couple weeks ago we read of the indictment of the Anaconda Co. for defrauding the government by crooked methods of inspection. Practically all of the larger oil companies have been indicted in as many as six states for one charge or another. So it is with the motor car manufacturers, and many others which I am sure you yourself can recall.

I just happen to know that the rate I pay for my phone, lights, freight, passenger fare; the rate of pay for my employees and for many other services, were fixed by law. Not because of the benevolence of the phone company and others, but simply because their greed blinded them. Frankly, because they are just crooked enough that in spite of the fact that they employ the most brilliant, slickest, slimiest, trickiest, crookedest and louseiest legal talent available, they knew so close to the line that they actually appear not to know which is lawful and which side is not. Big business management, as such, is incapable of self government. That accounts for the many restrictive laws which our law-makers find necessary to enact.

M. L. Stewart

(Answer)

Dear Mr. Stewart:

It's a little difficult to follow the somewhat incoherent line of reasoning in your emotionalized letter of Feb. 1, but I gather you have seen "big business" accused of various things

in the press, and that you are more than ready to believe the worst without waiting for the facts to be heard.

You remind me of the old maid in my home town down in Illinois who used to be disappointed if a young couple's first baby arrived in anything more than five months.

Anybody can accuse anybody else of anything in this "land of the free," and often does. Indictments don't prove a darned thing. Neither does Drew Pearson's wild-eyed comparison of a French association of taxpayers with the NAM. Have you ever been to North Africa? What big business goes on there?

"Big business," like the banks and Wall Street, have been perennially popular targets for politicians. They're sure fire. It's human nature to fall for the line that "souless corporations" are gypping the "little fellow" out of something or other. But the facts prove otherwise.

Fact of the matter is, most big-corporation officials are so skittish of the politicians and public opinion that they won't put 15 cents in a cigarette-vending machine without a corps of witnesses and advice from a lawyer, plus a written opinion from the Attorney General.

Demagogues can always fool some of the people some of the time.

Editor

HOW MEAT RATIONING AFFECTS LOCKER USERS

Wagner Electric Corporation
Central Parkway at Race St.
Cincinnati, Ohio

Editor:

I assume that it is in order for a subscriber to address you on a point of information.

Your magazine, and other business publications, recently reported that the meat rationing regulations did not include any restrictions on frozen food locker plants. I am informed that the local OPA office has used the interpretation that a locker plant that buys meat in any dressed form is a distributor and, therefore, subject to all of the regulations pertaining to meat rationing.

You undoubtedly have the correct information about this situation, and I would appreciate your comments.

L. A. ETIENNE, Branch Manager.

Answer: See the news story in this issue which deals specifically with this somewhat muddled situation.

WHICH ORGANIZATION OF JOBBERS IS MEANT?

Apollo Service Inc.
15-17 Shipman Street
Newark, New Jersey

Editor:

Will you please advise the names and addresses of the members of the Refrigeration Jobbers organization and oblige.

HARRY A. EPSTEIN, Vice President.

Answer: In reply to your letter of May 5, in which you ask for the names of members of the "Refrigeration Jobbers" organization, I am not quite sure just which organization you mean.

There is the "National Refrigeration Supply Jobbers Association" with headquarters at 28 North Clark Street, Chicago, Illinois, which is an organization of jobbers of parts and supplies for refrigeration systems.

There is also the "National Electrical Wholesalers Association" which has some membership among distributors of refrigerators and other major appliances. Address of this association's headquarters is 500 Fifth Avenue, New York City.

For lists of membership of either group, write to the association headquarters.

Is the Intent of Order L-38 To Override Gains Realized In P-126? Rationing of Heating & Cooking Stoves To Come About Sometime Next Month

New York Supplier Thinks Not, and Presents His Ideas on Certain Conflicting Provisions

— Supply Co.
New York, N. Y.

Editor:

We feel that a clarification of L-38, as amended, is urgently needed.

With respect to refrigeration and air conditioning (other than comfort cooling) we have a great many seemingly contradictory rulings. Under the restrictions of P-126 (d) (5) it states that no emergency service agency shall apply any preference rating provided for by this order "to obtain material which can be secured without such rating." Prior to L-38, as amended, it has been possible to secure, without rating:

1. Belts.
2. Refrigerants.
3. Controls.
4. Valves.
5. Fittings.

And such other material (other than copper tubing) that a supplier secured through a PD-1X application. PD-1X is a one-shotter form of assistance granted by WPB to enable civilian users to obtain supplies which they cannot procure themselves, having no preference ratings. Priority Regulation 1 (Par. 944.11) seems to indicate that material secured with the aid of a PD-1X must be disposed of in accordance with the provisions of PD-1X.

We thus find that a jobber who has secured material under a PD-1X must, under Priority Regulation 1, sell same without priority. That a service agency, under P-126, is prohibited from using this order to obtain materials which can be secured without it. That L-38, as interpreted, states that notwithstanding all other contradictory regulations, no person can secure this material without a preference rating of AA-4 or higher.

It is apparent that, in some manner, L-38 has been misconstrued. It would appear that all interpretations so far promulgated (none of which are official) tend to hinge on the phrase (b) (1) (i) "and no person shall accept delivery of such parts unless such parts are delivered either (A) for use in 'emergency repair service' and to fill a purchase order bearing a preference rating of AA-4 or higher."

This has been taken to mean that parts for emergency repair service can be secured only on a purchase order bearing a preference rating of AA-4 or higher. We feel that this phrase covers two distinct and

separate specifications. (1) emergency repair service, and (2) a purchase order bearing a preference rating of AA-4 or higher. Under assignment of preference ratings, P-126 Class III, (3) AA-4 to deliveries of materials, makes a very clear distinction. It states:

"(i) Required to maintain an inventory.

"(ii) For emergency repair service to any system."

L-38, under (b) (1) (iii) Comfort Cooling, in referring to emergency repair service, leaves no doubt as to meaning by stating "except pursuant to an authorized order, or pursuant to a purchase order bearing a preference rating of AA-4."

Taken together, P-126 and L-38 (in which much the same phrasing is used) seem to complement each other. If it was the intent of L-38 to void the provisions of P-126 permitting an emergency inventory, the same phraseology as incorporated in L-38 (b) (1) (iii) would have been used.

The phrase would then read "for use in emergency repair service pursuant to an authorized order or a purchase order bearing a preference rating of AA-4 or higher." When within the same order two entirely different phrases are used, it is not logical to assume they mean the same.

In view of the importance of refrigeration service, by no stretch of the imagination can L-38 be construed to mean that the welfare and health of the civilian population should be endangered, while, on the other hand, permitting other industries and services to purchase the same critical materials (in many instances the very identical items) for uses not directly concerned with public health and safety.

For example, it is far fetched to assume that a garage, or filling station, may purchase (under CMP Reg. 5) belts and steel and copper parts for an air compressor while denying these same parts to a refrigeration service agency.

We feel it is the intent of L-38 to more rigidly restrict the flow of critical materials, but not to strangle the refrigeration industry. Nor is it the intent to penalize some refrigeration service agencies (who for one reason or another may not be in possession of a P-126 certificate of authority) while permitting other services to operate unrestricted.

(— —) Manager

Includes Gas-Operated, But Not Electric Stoves

WASHINGTON, D. C.—Nation-wide rationing of heating and cooking stoves that burn coal, wood, oil or gas will begin in the latter part of June, Price Administrator Prentiss M. Brown has announced.

In the new program, OPA, as directed by the War Production Board, expands the plan under which coal and oil heating stoves already are rationed under Ration Order 9 in 32 states where fuel oil is rationed. The plan for rationing cooking stoves as well as heating stoves was developed to assure fair distribution of the limited number of stoves that will be available, Mr. Brown stated.

The plan also takes into consideration relative shortages and is designed to encourage the use of less scarce fuels. In the fuel oil rationed areas, for example, it will be relatively easy to obtain coal-burning equipment and difficult to buy oil-burning equipment.

Six specific types of stoves will be rationed under the program: coal or wood heating stoves (including laundry stoves, but excluding water heaters); oil heating stoves; gas heating stoves; coal or wood cooking stoves; oil cooking stoves; and gas cooking stoves.

Highlights of the plan as it will effect consumers, dealers, wholesalers and manufacturers are:

1. Anyone who wants to buy a stove after plan becomes effective

will apply first to his War Price and Rationing Board for a purchase certificate which will be issued on the basis of need.

2. The number of purchase certificates which a War Price and Rationing Board may issue will be limited by a quota system set up to assure fair allocation of the total supply of stoves.

3. Dealers and wholesalers, on dates to be announced, will register their 1941 sales of new stoves and their present inventory of new stoves with War Price and Rationing Boards. The Board will assign each dealer or wholesaler an inventory allowance. Manufacturers will register with OPA in Washington on a special form to be supplied them.

The plan has been developed, Administrator Brown stated, with the advice and active cooperation of industry representatives, as well as of consumer groups who made suggestions relating to consumer needs. Dates for trade registration and for launching the plan will be announced as soon as the printing and distribution of forms make it possible to do so.

While certain other details are still to be worked out, the plan in broad outline is complete and will be explained to OPA personnel in the field at a series of training schools scheduled for the next few weeks in various parts of the country. Several

meetings for members of the industry and trade are also scheduled.

After the plan goes into effect, applicants for a stove purchase certificate will qualify under these general eligibility rules:

1. The stove is to be used in essential living or working space; and
2. The applicant has no stove that can be used; or
3. The stove is to replace one worn out beyond repair; or
4. The applicant has not within 60 days disposed of a stove which could have been used.

Applicants for coal or wood stoves, either for heating or cooking, in the fuel oil rationed area, will have a special eligibility if: (1) they have been burning fuel oil and are eligible for an auxiliary fuel oil ration of 350 gallons or more; (2) they are planning to convert from fuel oil to coal or wood (this will apply only in areas to be designated by OPA); and (3) (also in areas to be specified) if an oil fired central heating plant already installed is not supplying sufficient heat for health and comfort.

OPA May Fix Service Prices In Certain Areas

WASHINGTON, D. C.—When there is an actual or threatened shortage of essential services in an area, either the Price Administrator or the regional administrator for the area may establish maximum prices for them, the Office of Price Administration said today.

This is provided specifically in Amendment No. 20 to Maximum Price Regulation No. 165, as amended—Services—effective May 7, 1943.



We Ran This Advertisement in 1918—We Repeat its Prophecy Now:

Through Wars and Peace
CURTIS Has Served
the Nation Since 1854

Established before the Civil War, Curtis has served the nation for over eighty-nine years—for civilian uses in time of Peace, and now, as during World War I, by devoting its production to the demands of War.

Today the engineering and production facilities of the Curtis plant are enlisted in the design and manufacture of special equipment for the Armed Forces of America.

As in World War I, Government requirements have necessarily entailed sacrifice and inconvenience on the part of our good customers. But, we say again, as we said in 1918,

"in the light of recent war developments, we know this condition is only temporary—and soon, we trust, having done our full duty to the nation in its crisis, we will again be able to serve our patrons with the added facilities and increased organization which will be the heritage of our war-time activities."

Commercial Refrigeration and Air Conditioning

CURTIS REFRIGERATING MACHINE DIVISION of Curtis Manufacturing Company
1912 Kienlen Avenue, St. Louis, Missouri

Commercial Refrigeration Application Engineer

With actual field experience in the design, installation and estimating of Freon refrigeration systems up to 10 H. P., to take charge of commercial application work in home office of large manufacturer in Middle West.

Applicants must be draft exempt. Excellent post war future for right man. Give business history, education, age, and salary expected.

Sales Engineer

National manufacturer of refrigeration and air conditioning requires sales engineer for Eastern Territory.

Applicant must be able to prepare specifications, estimate and engineer jobs. Good personality and ability to establish sound business relations with government agencies are essential.

Applicants must be draft exempt. Excellent post war future for right man. Give business history, education, age, and salary expected.

Box 1450, Air Conditioning & Refrigeration News

In the Service

SEVEN years before the beginning of the Civil War, this institution was established under the name of the CURTIS & CO. MFG. CO. Through all these sixty-four years—in times of peace and through stress of wars—we have maintained the high ideals on which this establishment was founded—have steadily increased our lines of endeavor—and constantly grown in size and national importance.

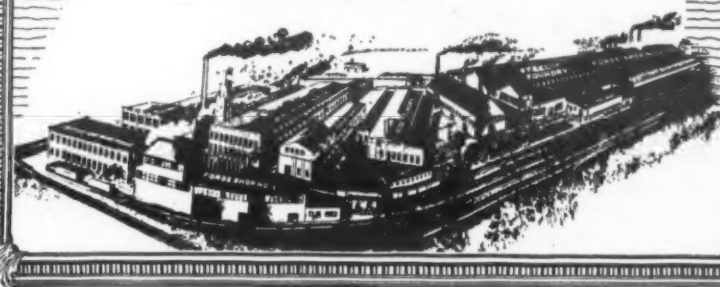
Our success is graphically reflected in the present size of the CURTIS plant, which now covers nearly twenty acres, employs over two thousand men and is recognized as one of the best organized and equipped institutions of its kind in this country.

From the first day of America's entry in this great world war—the CURTIS COMPANY has been in the Service—one of America's Volunteer Industries. While we are still manufacturing our regular line—it has been our privilege and accepted duty to reserve our output for Government requirements and essential industries exclusively—and we have spared no effort to meet every call that the Government has made upon us.

These restrictions have necessarily entailed sacrifice and inconvenience to many of our good customers—but in the light of recent war developments, we all know this condition is only temporary—and soon, we trust, having done our full duty to the nation in its crisis, we will again be able to serve our patrons with the added facilities and increased organization which will be the heritage of our war-time activities.

In the new era of reconstruction which will follow the close of this great struggle, Curtis Air Compressors, Curtis Air Hoists, Curtis Cranes and Curtis Single I-Beam Trolleys will play their important part.

CURTIS MANUFACTURING CO.
1570 Kienlen Avenue St. Louis, Mo.
Branch Office:
324 Hudson Terminal, New York City



Success of Salesmanship Is Called Key to Postwar Era Prosperity

George Jones Outlines 4-Point Program For Salesmanagers

NEW YORK CITY.—Hitting out at the "self-appointed critics" of salesmanship in America, George S. Jones, Jr., vice-president and general sales manager of Servel, Inc., declared today in an address before the American Marketing Association at the Hotel Biltmore here that salesmanship as an economic force in the United States has been undervalued.

There has been too little appreciation, he maintained, of the important role salesmanship has played in the life of America, in developing American industry, and in helping to attain the higher standard of living that is the American way.

Salesmen have sold everything but salesmanship as such, Mr. Jones declared in his address, entitled "Salesmanship's Responsibility for the Future." This lack of salesmanship on the part of American business in making its voice heard and telling its story is very probably "the one great weakness of American industry," which would be more assured of retaining the free enterprise system to which industry owes its present success, he maintained.

Salesmen Find New Functions

In stressing the powerful economic force which salesmanship has become in this country, Mr. Jones pointed out that "Industry is using salesmen today for a variety of things other than the accepted one of selling a product." It is using them, he said, "to increase production to meet the war demands; to combat absenteeism, to sell patriotism to its workers, to improve relations between management and labor. The government is calling on selling and advertising experience to sell bonds."

Speaking of the post-war world, and post-war planning, Mr. Jones declared:

"It is my firm conviction that on the success of the sales managers of the future will depend the prosperity of the America of the future."

4 Points For Postwar

Salesmanagers' post-war responsibilities, as seen by Mr. Jones, include the following:

First, find out how many people you will employ in the post-war period. Most of us have increased our employment during the war. Some of these employees may go back to their jobs as housewives—the youngsters back to school—the oldsters may retire—but many of them will remain. We must provide employment for our returning soldiers and the post-war sales manager will consider his number one responsibility the employment of his company's wage-earners.

READING WHAT TO ADD

"Second, the sales manager should be a major factor in the determination of what to build—what improvements to put on the products they made before the war, and what appliances, if any, to add to their line after the war.

"Third, market studies should be made to determine the location of prospects; locations geographically and socially. This study will permit a determination of the price range of the product to be manufactured. It will be a factor in the determination of what products are to be manufactured.

"Fourth, the sales manager should determine the size of the organization in his own employment and the type of distribution he is to pursue and develop.

Advertising's Message

"Advertising must be planned as to message and as to media. The sales story must be developed, sales literature designed. On the basis of these studies and the findings of these facts—with the shock troops and barrages of advertising, sales research, market analysis, distribution methods, he must then build his army of occupation. He must prepare to select, to hire and to train his salesmen, the salesmen of his distributors and dealers, for it is this army of

occupation that after the first rush of supplying pent-up consumer goods, will determine whether we are to pass on to our sons the heritage that our fathers passed on to us."

Takes Issue With Whiteside

Mr. Jones disagreed with the statement attributed to Arthur D. Whiteside, recently appointed to head up the War Production Board's Division of Civilian Supply, that this country's greatest economic troubles have resulted from salesmen.

In his championship of the American salesman, Mr. Jones said:

"Let me remind you that today American business admits that it has too long lacked a voice—that it has too seldom and too inadequately told its story. For too many years it has made no effort to identify the important role that it was playing in the

life of America. Could it be that here we find the one great weakness in American industry?

"Could it be that industry would be better off—could it be that industry would be more sure of the retention of the system of free enterprise that gave birth to industry and nurtured it to its present full flower, if they had brought more sales abilities into the front office?

"The part that salesmanship has played in developing industry, the essentiality of salesmanship in attaining the objective of the higher standard of living that is the American way is being recognized at last not only in industry, but outside. It is being recognized at long last by the government in the important role that it can and is playing in fitting together the forces of this country that we may more quickly win the war."

Changes in Postwar Design Seen Caused By New Materials

NEW YORK CITY.—New materials "born of war-quickened imaginations" will radically change the manner of living when peace comes believes Carl H. Hendrikson, Jr., regional business consultant of the Department of Commerce.

Mr. Hendrikson declared that the reconversion to a peace economy would be "surprisingly rapid" since industry had performed "miracles" in conversion to war production and the experience thus gained would prove valuable in reconverting to civilian production. The incentive to outdo competitors would hasten retooling.

A seven-fold increase in industry's capacity to produce aluminum, a reduction of price to 15 cents a pound ingot and the technique of processing aluminum, he explained, would bring this metal into hundreds of

new uses, making present railroad rolling stock, among other things, obsolete.

Mr. Hendrikson went on to picture aluminum window frames, gutters, down spouts, finishing hardware and aluminum furniture which would not have a "tinny" appearance.

Speaking of plastics, Mr. Hendrikson foresaw glass stoves; a standard size bathtub that would weigh but six pounds; translucent, noncorrosive window screens, upholstery fabrics; table cloths from which ink spots or gravy could be wiped off with a wet cloth; water pipes that need no fittings; automobile tires of plastics; and soybean blankets.

"I am convinced that the pent-up, starved demand for consumer's durable goods and the potential purchasing power available in the hands of

"Until production can catch up to a reasonable extent with demand, government will be expected to maintain such controls as allocation and price ceilings."

the consumers have all the makings of a post-war boom, the greatest boom we have ever had. The big problem will be that of preventing inflation.

STARTS JUNE 1ST Another Series of
GENERAL ELECTRIC
FIELD SCHOOLS featuring REFRIGERATION
PLUS A COMPLETE WARTIME SERVICE PROGRAM
THROUGH THESE PORTALS PASS THE
WORLDS BEST INFORMED SERVICE MEN

C'MON IN—LOOK AROUND! A PRIVATE PREVIEW JUST FOR YOU

HAVE I MISSED ANYTHING YET?

BOY! IS SHE BUILT!

—AND WHAT FEATURES!

YEAH, BUT SHE'S AWFUL COLD!

MOVIES! Finest professional talent! The DR machine in the stellar role. New, up-to-the-minute repair methods and techniques.

Don't blame it on the oven

HOW TO TAKE CARE OF YOUR ELECTRIC APPLIANCES

HEADS OR TAILS?

DON'T BLAME IT ON THE OVEN... A liberal education that cuts down complaints. Full color. Practical. HOW TO TAKE CARE OF YOUR ELECTRIC APPLIANCES... A swell new handbook booklet for the conservation-conscious customer. HEADS OR TAILS... Shows you how to make SERVICE a real profit enterprise! Tailored right to your everyday needs.

WHAT ABOUT SPARE PARTS?

PARTS! SO THAT'S WHAT ALL THOSE LITTLE GADGETS I'VE BEEN SEEING ARE!

NOBODY EVER SHOWED ME HOW TO FIX AN IRON

"HOW TO REPAIR GENERAL ELECTRIC IRONS"

An exclusive new film. Talk about timing! Just when the need is greatest. Uncle Sam says, "Iron Repair Very Essential."

PARTS TALK! Straight from the crystal! Latest information on repair parts and what the future looks like!

WAR BONDS WILL BUILD AND EQUIP NEW VICTORY HOMES

Whiteside Ponders Report on Proposed Civilian Goods Cut

WASHINGTON, D. C.—In revised form, a report prepared last January by the WPB program committee to bring to the war agency a picture of civilian needs has been turned over to the new Civilian Requirements Division headed by Arthur D. Whiteside, a vice chairman of the WPB.

Since January the report has been the basis for study and revision by WLB experts inasmuch as operation of the CRD (formerly OCD) has assumed greater importance during recent months. Originally, the report warned that "every one will suffer loss or, at best, discomfort in 1943," and set forth a six-point program to ease an estimated cut of 15 to 20 percent in goods and services available to civilians this year.

The cut may be more apparent in such items as clothing and furniture,

the reports points out. However, it is apt to show in household and motor fuels, transportation, services.

Following are the six points recommended in the January report:

1. Extend consumer rationing as far as staff and experience permit.
2. Eliminate civilian manufacturing and as much of wholesaling as possible from labor shortage areas.
3. Increase productivity of retail trades and service industries with emphasis upon localities where labor is short.
4. Curtail less essential goods and services and simplify and standardize the more essential.
5. Protect consumers' minimum requirements in every important area.
6. Make the public understand the program.

Summing up the program, the report says, "Competition in advertising and display, in overstuffed service to leisured customers, are costs we can bear in peace-time in order to maintain the freedom of the consumer and the business man; in time of war they are intolerable waste of potential productive power. As our needs increase, this peace time prodigality must be eliminated."

2 Members Added By Jobbers Assn.

CHICAGO—The National Refrigeration Supply Jobbers Association announces the acquisition of two new members, the R. E. Thompson Co. of St. Louis and the Gustave A. Larson Co. of Milwaukee.

In addition to its Milwaukee office, the Larson Co. operates branches at Green Bay, Kenosha, Madison and Oshkosh, Wisconsin, and at Rockford, Illinois.

Square D Net For Quarter \$679,203

NEW YORK CITY—Square D Co. reports a net profit for the quarter ended March 31 of \$679,203, after \$1,987,193 federal taxes, or \$1.56 a share, compared with \$1,019,191 net profit, after \$3,668,510 federal taxes, or \$2.36 a share for the same quarter last year.

Serviceman's Daily Letter-Writing Stint Eliminates Unwanted Callbacks

MONTGOMERY, Ala.—It may seem unusual for a refrigeration serviceman to spend extra time in teaching his customers how to keep their refrigerators going. However, that's just the means J. H. Reese, head of Capital City Refrigeration & Electric Co., here has developed to cut down the heavy load on his organization.

"We try to prevent callbacks and too-frequent service calls even though that cuts down the opportunity to work on the equipment," Reese grinned. "But actually it is a good investment in time and trouble to write a letter to each refrigeration service customer explaining why his equipment broke down, and how to prevent this in the future. We have more business than we can handle, and want to cut it down while still retaining the goodwill of the customer. The personal-letter system has proven itself

the most reasonable way to do it."

Out of every repair job, Reese or his mechanics make out a complete ticket covering the work, with a section going a little farther than usual to include "remarks" about that specific case. For example, if the compressor is undergoing too heavy a load, the fact that its life can be lengthened by taking off part of the load part of the day is jotted down.

If a walk-in refrigerator is opened too many times a day, and the expansion valve "gives out," a recommendation to rearrange the contents or even cut an extra small door into it is likewise noted.

All such facts are carefully scanned at the end of the day, and a letter dictated to the secretary which covers the case briefly.

"For example, we found a reach-in box which gave a lot of trouble because the condenser was allowed to foul up with dirty lint and grease," he explained. "I sent a letter to this customer, pointing out that although we enjoy his business we don't want too much of it, and explaining why the need for service occurred. We wind up the letter with a few tips on how to keep the condenser and fan clean, and leave it up to the customer's judgement to follow our suggestions. Nine out of ten of them do, and consequently, we cut down the number of calls to be expected."

"This has paid us unusual returns. When one food packer suddenly was given an important dehydrated-food contract and the government allowed him to buy new refrigeration equipment, he called us in to install and maintain it—all because we took pains to help him with the old system. In other cases our customers write in or telephone in for extra information on keeping up their equipment. Naturally this takes a little time and trouble, but it is well worth the extra trouble," Reese uses a dictating machine and with it can knock out the day's letters in half an hour or so.

OPA Denies Requests For Raise in Prices Of Used Cleaners

WASHINGTON, D. C.—Four petitions for increases in prices of used vacuum cleaners were denied May 17 by the Office of Price Administration in accordance with President Roosevelt's "hold-the-line" order of April 8.

If these petitions had been granted, all sellers in addition to those petitioning would have been able to sell at the higher prices.

A review of the ceilings fixed in the Order 294, OPA said, led to the conclusion that they were validly set and therefore cannot be raised now as the President's order directed no increases except to the minimum extent required by law.

The 30 petitioners for general increases were Ace Electrical Appliance Co., Consolidated Vacuum Cleaner Co., Brighton Vacuum Cleaner Co., and Sun Vacuum Stores, Brooklyn, New York; General Vacuum Cleaner Co., United Vacuum Cleaner Co., and Metropolitan Vacuum Cleaner Co., Bronx, New York; National Vacuum Cleaner Supply Co., Inc., Hub Vacuum Stores, and Milburn Vacuum Cleaner Co., New York; Queens Vacuum Co. and Vanity Vacuum Cleaner Co., Inc., West New York, N. J.; Quaker Vacuum Stores, Rhode Island; Standard Vacuum Co., Vim Vacuum Cleaner Co., American Vacuum Cleaner Co., and Penn Vacuum Stores, Philadelphia; U. S. Vacuum Stores, New Haven, Conn.; Union Vacuum Stores Inc., and Renew Sweeper Co., Detroit; Ace Vacuum Stores, Boston; Sun Vacuum Stores, Los Angeles; Jay Vacuum Stores, Syracuse, N. Y.; Bell Vacuum Stores, Pittsburgh; Clean-Rite Vacuum Stores, Washington, D. C.;

Another applicant, The Hoover Co., North Canton, Ohio, asked for increases in the separate list of prices specified for its models when rebuilt in its factory.

Buckeye Vacuum Cleaner Supply Co., Green Vacuum Cleaner Co. and United Vacuum Cleaner Stores Inc., Cleveland, and Van Vacuum Stores Inc., Des Moines.

TVN AND TAKE A CHAIR!

IMPROVED AIDS TIME-SERVICE BUSINESS!

YOU'RE JUST IN TIME! DID YA BRING TH NEXT LESSON IN TH T PLAN INSTRUCTIONS?

BRAND NEW FILMS on CA Bleeding and Scotch Yoke machines with handy manuals of all you have seen to take home with you!

THEN WE COME BACK TOMORROW... AND WE WON'T HAVE TO LAY IN ANY COAL NEXT WINTER

IS THIS TH BOOK OF THE MONTH?

NO, THIS IS FOR THE DURATION!

HAPPY DAY! It's Here! The new 300 page Appliance Handbook. An all-time classic. The answers to all the common complaints on the full line of major appliances between 2 covers!

THE "T" PLAN! A 10-lesson Home Study Service Course for spare time improvement. It's FREE! The "T" Plan takes front and center at the June Field Meeting but you can get details NOW from your GE Distributor.

APPLIANCE SERVICE HANDBOOK

COMPLETE INSTRUCTIONS On the Care and Feeding of RANGES • WASHERS WATER HEATERS DISHWASHERS IRONERS Etc.

OK! LET'S MAKE A DATE NOW

GEO. MORROW!

CHECK THIS LIST FOR THE NEXT G-E SERVICE TRAINING MEETING IN YOUR CITY (If city near you is not listed, check your G-E Distributor)

Abilene, Texas	Columbus, Ohio	Hagerstown, Md.	Medford, Ore.	Queensboro, N. C.	South Bend, Ind.
Allentown, Pa.	Dallas, Texas	Harrington, Del.	Memphis, Tenn.	Quincy, Ill.	Springfield, Ill.
Altoona, Pa.	Danville, Va.	Harrisburg, Pa.	Middleboro, Ky.	Raleigh, N. C.	St. Louis, Mo.
Amarillo, Texas	Davenport, Iowa	Hartford, Conn.	Milwaukee, Wis.	Reading, Pa.	Stockton, Calif.
Appleton, Wisc.	Dayton, Ohio	Houston, Texas	Minneapolis, Minn.	Richmond, Va.	St. Paul, Minn.
Ashtland, Ky.	Denver, Colo.	Indianapolis, Ind.	Morganon, N. C.	Roanoke, Va.	Syracuse, N. Y.
Ashtland, Ohio	Des Moines, Iowa	Jefferson City, Mo.	Mount Carmel, Pa.	Rochester, N. Y.	Tampa, Fla.
Ashtabula, Ohio	Dubuque, Iowa	Joplin, Mo.	Muncie, Ind.	Rockford, Ill.	Terre Haute, Ind.
Atlanta, Ga.	Duluth, Minn.	Kansas City, Mo.	Nashville, Tenn.	Sacramento, Calif.	Toledo, Ohio
Atlantic City, N. J.	Du Quoin, Ill.	Knoxville, Tenn.	Norfolk, Va.	Saginaw, Mich.	Tucson, Ariz.
Bakersfield, Calif.	Edenton, Va.	La Crosse, Wisc.	Oakland, Calif.	Salisbury, Md.	Tulsa, Okla.
Beaumont, Texas	El Paso, Texas	Lancaster, Pa.	Oklahoma City, Okla.	San Antonio, Texas	Tyler, Texas
Bellingham, Wash.	Eugene, Wash.	Lawrenceburg, Ind.	Olympia, Wash.	San Benito, Texas	Victoria, Calif.
Billings, Mont.	Evansville, Ind.	Lexington, Ky.	Omaha, Neb.	San Bernardino, Calif.	Waco, Texas
Binghamton, N. Y.	Fargo, N. Dak.	Lexington, Va.	Oxford, Ohio	San Diego, Calif.	Walla Walla, Wash.
Bluefield, W. Va.	Findlay, Ohio	Long Island City, N.Y.	Paducah, Ky.	San Francisco, Calif.	Waterloo, Iowa
Boston, Mass.	Flagstaff, Arizona	Los Angeles, Cal.	Peoria, Ill.	San Jose, Calif.	Wenatchee, Wash.
Bryan, Ohio	Fresno, Calif.	Louisville, Ky.	Philadelphia, Pa.	Santa Barbara, Calif.	West Orange, N. J.
Cape Girardeau, Mo.	Greensboro, N. C.	Luray, Va.	Phoenix, Ariz.	Scranton, Pa.	Wichita, Kan.
Charleston, W. Va.		Mason City, Iowa	Pittsburgh, Pa.	Seattle, Wash.	Wichita Falls, Texas
Chattanooga, Tenn.		Massillon, Ohio	Portland, Ore.	Sioux City, Iowa	Wilmington, Del.
Chicago, Ill.		Maysville, Ky.	Providence, R. I.	Sioux Falls, S. Dak.	Wytheville, Va.
Clearfield, Pa.			Pueblo, Colo.		

Ask your General Electric Appliance Distributor for Meeting Dates and Reservation for Yourself and Service Staff.

GENERAL ELECTRIC

Researchers Believe They Have Solution To Freezing of Milk

STATE COLLEGE, Pa.—Professors Francis J. Doan and Joseph G. Leeder, dairy manufacturing specialists, are developing a process for the successful preservation of milk by freezing, in the same way that meat and vegetables are now frozen.

The problem that frozen milk presents is that it does not reconstitute properly, the fat globules in the cream separating into an oily film when the milk is changed back to liquid. This is unattractive both to taste and sight.

But the Doan-Leeder method is said to surmount this difficulty; no fat separation takes place; and when changed back to liquid, the milk looks and tastes like the fresh product.

New Voltage Tester Reads Like Thermometer

NEW YORK CITY—Superior Instruments Co. is producing a new voltage tester which reads like a thermometer, they claim, is compact, and operates without use of meter, switch or tip jacks.

The manufacturers assert that its simplicity is in contrast to other metered instruments yet, they state, it is highly sensitive and accurately registers voltage, kind of current, condition of the line (whether open), which leg is grounded, frequency, blown fuse, leakage between motor and line, and other technicalities.

Many Changes Made In CMP Regulation 5 on Plant Repairs

WASHINGTON, D. C.—CMP Regulation No. 5, dealing with Maintenance, Repair and Operating Supplies, has been amended, the War Production Board announced May 14.

The preference rating AA-2X heretofore assigned to persons engaged in activities listed in Schedule II of the Regulation, becomes AA-2. The AA-2 preference rating has been re-established by an amendment to Priorities Regulation No. 1, being issued today. The A-10 preference rating, available to persons engaged in businesses not listed on either Schedules I or II, becomes AA-5.

SCHEDULES REVISED

Schedules I and II of the Regulation have been completely revised. Some activities and businesses formerly listed in Schedule II have been transferred to Schedule I and some formerly in Schedule I now appear in Schedule II. These changes will alter the preference ratings which may be used by the industries involved.

Provisions of the Regulation relating to obtaining minor capital additions, have been clarified. The amendment permits minor capital additions to be purchased under the MRO procedure where the cost of any one complete capital addition does not exceed \$500, excluding the purchaser's cost of labor. "One complete capital addition" means a group of items customarily purchased to-

gether or all items which would be normally purchased as part of a single project or plan.

Capital additions may not be subdivided for the purpose of bringing them within the \$500 limit. Where such a capital addition involves construction, authorization to construct must be obtained to the extent required by Conservation Order L-41, or by any other applicable Order or Regulation of the WPB.

CMP Regulation No. 5 is clarified to indicate that aluminum may not be obtained under the MRO procedures except where the use of other materials is impracticable.

Persons engaged in the business of producing products covered by Schedules I and II of the Regulation as revised, who need aluminum in any of the forms or shapes constituting controlled material in greater amounts than 100 pounds during any one calendar quarter, may apply for larger allotments by letter addressed to the Aluminum and Magnesium Division, War Production Board, Washington, D. C., Ref: MRO. This letter of application should contain substantially the information required by sub-paragraph (d) (1) (6) of Supplementary Order M-1-1, as amended March 10, 1943. If the application is granted, the applicant will receive an allotment number or symbol. He may then place an authorized controlled material order by endorsing his order form with the

allotment number or symbol and the certification prescribed in Paragraph (s) (3) of CMP Regulation No. 1 or in CMP Regulation No. 7.

The amendment makes it clear that a delivery order rated under the Regulation bearing the appropriate certification and the MRO symbol shall have the status of a delivery order bearing a preference rating with an allotment symbol as provided in CMP Regulation No. 3.

QUANTITY RESTRICTIONS

The quantity restrictions of the Regulation as amended provide that no person who uses the allotment symbol or preference ratings assigned by it to obtain any maintenance, repair or operating supplies, shall order for delivery during any calendar quarter maintenance, repair or operating supplies in an aggregate amount exceeding one-quarter of the aggregate expenditures for maintenance, repair and operating supplies during the calendar year 1942 (or his fiscal year ending nearest to Dec. 31, 1942), except that a person engaged in a seasonal business using such allotment symbol or preference rating may order for delivery during any calendar quarter up to, but not in excess of his aggregate expenditure for MRO items during the corresponding quarter of 1942 (or of fiscal year). This amendment places the quantity limit definitely upon an "order" basis, rather than upon a receipt of delivery basis.

AVAILABLE TO CANADA

In determining the dollar amount expended for MRO supplies during an operating quarter, expenditures made without the use of preference rating or symbol plus amounts expended in acquiring minor capital additions, shall be included as well as MRO items obtained with the use of the allotment symbol or preference ratings assigned under CMP Regulation No. 5. In determining the amount expended for MRO items during base period, the same procedure shall be followed, except that expenditures for minor capital additions shall not be included.

Quantity restrictions on the use of MRO procedure are removed from manufacturers whose aggregate requirements for MRO supplies do not exceed \$5,000 per year.

The MRO procedures have been made available to manufacturers operating in the Dominion of Canada. Upon application by the Department of Munitions and Supply, Ottawa, Canada, such manufacturers may be authorized by the War Production Board to operate under CMP regulation No. 5, subject to such conditions as may be contained in the authorization.

The amendment permits the United States Army and Navy to use the MRO procedures to obtain maintenance, repair and operating supplies for plants owned and operated by them to the extent that such plants are engaged in the production of products or are engaged in businesses listed in Schedules I or II of the Regulation as revised.

PROVISION FOR REPAIR SHOPS

Persons (such as service repair shops) engaged in the business of doing maintenance or repair work for others may use the same allotment symbol and preference rating to obtain materials for the performance of such work which their customers would be entitled to use if the customers did the work themselves. Expenditures for materials needed for such work shall be treated as the customer's expenditure for the purpose of computing quantity restrictions under Paragraph (f). However, persons engaged in such business may request allotments of controlled materials and preference ratings by filing Form CMP-4B, but if this procedure is followed, it must be used exclusively and customer's ratings or symbols may not be employed.

LANDLORD AND TENANTS

A Landlord may use his tenant's allotment symbol or rating to obtain MRO supplies (including controlled materials) for the leased property, if the tenant is engaged in production of products or a business listed in Schedule I or II. However, where the same property is occupied by several tenants and the supplies are not for the exclusive benefit of a single tenant, the landlord may only use a tenant's rating is 75% or more of the leased property is leased to tenants on Schedule I or II, and in such case if any are on Schedule II he can only use the AA-2 rating.

Persons requiring MRO items who are unable to obtain them with ratings assigned by CMP Regulation 5, as amended, and persons requiring controlled materials except aluminum, for MRO purposes, who are not listed in Schedule I or II may apply for a higher rating, or the right to use the MRO symbol to obtain copper and steel, to the nearest local office of the WPB, on Form PD-1A.

The amendment provides that when any Order in the E, L, or M series assigns a specific preference rating to the delivery of any particular material to be used by a particular industry or for a specified purpose, such rating shall control, and the preference ratings assigned in CMP Regulation 5 may not be used.

For example, Order M-41 assigns a rating of A-10 to deliveries of chlorinated hydrocarbon solvents for use in the fumigation of stored products, including grain. A person who needs a chlorinated hydrocarbon solvent for such purpose, may apply a rating of A-10 to its delivery, and must not apply a rating assigned under CMP Regulation 5.

Attention is called to the fact that certain provisions and restrictions contained in P orders, including definitions, requirements for making applications and filing reports, and others, are retained in force under the amendment.

The amendment makes it clear that ratings and allotment symbols assigned under the Regulation must not be applied to deliveries of items appearing on List A, regardless of whether or not such items are required for maintenance, repair or operating supplies.

THEY HAD TO BE FIT

TO SEE ACTIVE SERVICE



One of the AMCOIL Test Chambers now in vital war production work.

AMCOIL Test Chambers, too, had to demonstrate their mettle — prove that they were *precision* machines fully capable of testing *precision* instruments under extremes of low and high temperatures.

AMCOIL Engineers made the grade and their products are now serving Uncle Sam exclusively. But this makes these experts all the more fit to overcome your temperature and humidity testing problems when their war-time work is finished.

The activities of AMCOIL Engineers "for

the duration" postpone their peacetime pursuits — but not too long, we hope. We await that time when AMCOIL technique of "war conditioning" can be applied *again* to industrial and commercial cooling equipment.

Right now, however, AMCOIL Engineers are ready to discuss your problems in atmospheric control — to plan with you for utilizing future AMCOIL Testing Chambers for their successful solution.

Direct all inquiries to Engineering Department.



AMERICAN COILS CO.

25-27 LEXINGTON STREET • NEWARK, N. J.

Need Methyl Chloride? NOW IS THE TIME TO GET IT

WE expect to be able to supply the current requirements of the refrigeration industry for Methyl Chloride, subject to the regulations of the War Production Board. Order what you need but please do not stock up unnecessarily.

Electrochemicals Department, E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Delaware.

Important Don't let idle cylinders hold up supplies now available. Look through your stocks and warehouses for any empty cylinders, or cylinders which can be emptied . . . and return them promptly.



METHYL CHLORIDE

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

Refrigeration Training Expanded at Camp Lee

From Crude Beginnings, Training School Has Developed a Complete Maintenance Course

By Master Sergeant Elton W. Mattson, Instructor, Refrigeration School, Quartermaster Replacement Training Center, Camp Lee, Va.

April 1, 1941, is a date to be remembered at Camp Lee, Virginia, for on that day the quartermaster Replacement Training Center's Refrigeration School started its first classes in the second floor of a barracks, using foot lockers for benches, and the supplies, equipment, and texts consisted of but one Army technical manual—"Subsistence Bulletin 21, Refrigeration."

The instructional staff included two officers who were very enthusiastic about the importance of refrigeration in the Army and the need for training soldiers to become skilled in handling refrigerating equipment, and two non-commissioned officers capable of doing their task as assistant instructors.

Thirty-eight trainees comprised the first class, all of whom were eager to learn more about refrigeration. Some had a background of training and experience in this very interesting, expanding field.

Early Difficulties

With the newly-organized Camp Lee band practicing next door and with men tramping through the barracks, instructing trainees was rather difficult, and the need was seen for better housing facilities. The new location was a small office building about 15 by 25 feet. Here the school started to take shape.

The early weeks of the training period were spent in intensive review of the fundamentals of mathematics, physics, and chemistry; the mechanical principles to cover the operation phases of refrigeration; and instruction on the handling and inspection of perishable food supplies. These topics were covered, to the best of the instructor's ability, with the limited textbooks and equipment on hand, and following the outline of the tentative training schedule that had been produced by the office of the Director of Supply Training. The schedule was one of the many prepared for the various schools during those early, hectic days of Camp Lee's re-birth—once more to train American soldiers enroute to the battlefields of the world.

Equipment and supplies were slowly finding their way to the school, arriving there by various ways, and, upon arrival, being put immediately to the best of use. Equipment, that for many years had had its own place in the junk yards and dump grounds in the vicinity of Camp Lee, soon started to be of very practical importance to the instruction work of the school.

It was at its new location that the first graduation of the Refrigeration School took place. The two assistant instructors were assigned with the men and helped form one of the first refrigeration companies of the Army.

Two weeks later, when the new classes were ready, two former students were assigned as assistant instructors to help carry on the development and advancement of the Refrigeration School.

Got Practical Knowledge

With more equipment coming in, some old and some new, with schedules being made to take care of the expanding classes, the Refrigeration School was really starting to produce. The following weeks' training classes were interspersed with actual functioning periods at the camp refrigeration plant and inspection tours of cold storage warehouses and local ice plants, all of which were aiding the students to attain more knowledge, both theoretical and practical, in the refrigeration field.

With the altering of the technical training program, and the expansion of the school student body, new schedules, including more practical work phases particularly laboratory and shop problems, were in evidence. The school moved from its cramped quarters to a larger building, where a shop area was arranged. Text and reference books were needed where-by students could do advanced study, therefore manuals were compiled by the school staff, mimeographed and

issued to the students.

The Refrigeration School, no longer in its infancy, now was training men as refrigeration mechanics for mobile and fixed units, as well as training men to be cold storage operators, inspectors, and handlers of perishable supplies. Actually two schools were in existence. New progress had to be drawn to cover fully both of the large important fields of Refrigeration and Subsistence.

Quarters again were inadequate and the instructional staff was too limited. To solve the problem of the crowded classroom and shop, tents were erected and used as additional classrooms, and students with experience in their specialized lines were used as assistant instructors.

Again a new location was found for the Refrigeration School, with larger shop surroundings and greater facilities for practical work. In addition to this, a new Table of Organization was formed, expanding the instructional staff. It was at this time that the Subsistence Section of the School was quartered in a separate building, adjacent to the Mechanical Section, thus two Refrigeration Training Schools were evolved from the one-time single-barracks-quartered school.

Various types of visual aids were being produced in both schools, including cut-away models of small domestic compressors, evaporators, condensers, various types of switches and valves, large scale diagrams of expansion valves, service valves, relays, simple refrigerating systems, cold storage warehouse, illustrated shipping tickets and numerous other diagrams, all very useful in aiding students in their effort to grasp this quite technical and involved subject.

The field of instruction in the mechanical section also was expanding. Lectures and practical work phases were being conducted on mobile equipment, which the Army was starting to utilize more and more. The Portable Prefabricated Cold Storage Unit was also used for training in the advancement and better qualification of Army refrigerating mechanics.

Form Own Companies

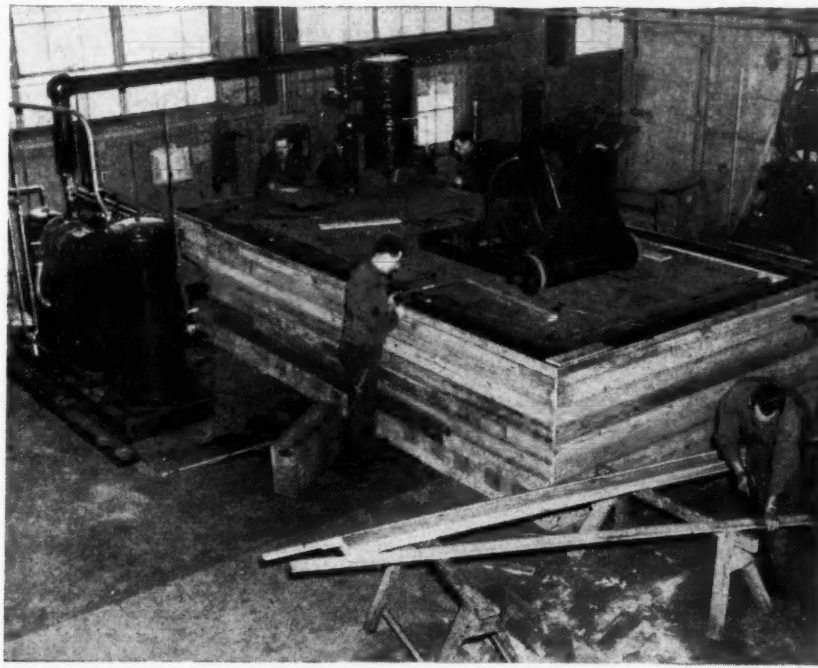
These mechanics, well trained in their specific lines, were forming Quartermaster refrigeration companies, and replacing men in existing refrigeration companies of the U. S. Army throughout the world.

As a result of the call for more refrigeration mechanics in the field and a change in the demand for men trained in methods of handling perishable commodities, subsistence training was allocated to the Warehousing School. All of the time and equipment of the Refrigeration School were utilized in the training of better refrigerating mechanics. Most of the students entering the school were men very desirous of learning refrigeration—some with practical knowledge to aid them in the classes and practical work, others with not as much practical work, but with initiative and a willingness to learn. Along with the men having civilian refrigeration experience were some with no previous experience in the field. The latter were the ones that improved and bettered our training methods and aids, for we had to create in such men a decided interest, and then carry forth the duties of teaching a subject highly important to the men, and vital to the Army with its millions of tons of food requirements.

A student upon entering the school first gets a basic knowledge of the theory of refrigeration, then advances into further studies of practical refrigeration, cold storage subjects closely interlocked with the mechanical phase, and artificial ice making, with laboratory and shop problems coordinating with the theory and practical work taught in the classes.

Some of the equipment now in use consists of commercial and domestic units, Prefabricated Portable Cold Storage Units, and a 3.6-ton Portable Ice Plant, all used to the utmost in

Army School Adds To Equipment



Installation of a 3.6-ton capacity ice plant at the QMRTC Refrigeration School at Camp Lee, Va. Piping and power supply installations have been completed, and the tank insulation walls are in the final stages of being installed. Trainees at the School are taught all phases of refrigeration.

our extensive and intensive training program.

The genius of the American refrigeration engineers was well illustrated in France during the World War, where we operated at Gievres, the largest refrigeration plant in the world.

After the plant was completed, it was ascertained that the French possessed no refrigeration cars, and

tonnage space from the United States was too limited to permit shipment of American-built refrigeration cars.

How was the problem solved? They simply reduced the meat products to zero temperature, sealed the French box cars as thoroughly as practicable, and thereby permitted the meat to act as its own refrigerant. It was found to be in perfect condition at the end of three to four weeks.

Designers Continue Fight Against Plan Of 'Holdover' Model

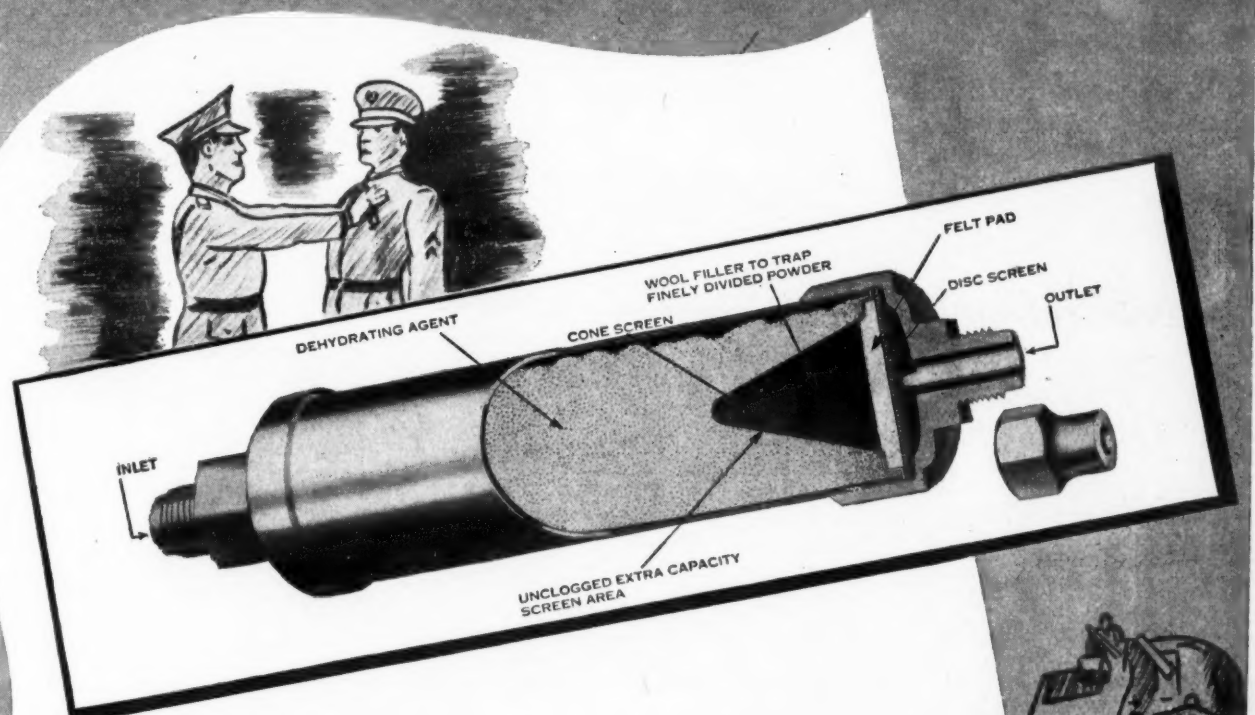
NEW YORK CITY—Manufacturers of consumers' durable goods were taken to task for holding firm convictions on the necessity of bringing out 1942 models in the period after the war by Leo H. Rich, an industrial designer connected with Walter Orwin Teague, and a member of the National Planning Assn.

American people have been educated by the manufacturers to expect new models each year, Rich told his listeners, and that while they will not expect the impossible immediately after the war, they anticipate with some eagerness the products they know to have undergone notable improvement.

He said that manufacturers should make every effort to bring out new models and that the reconversion process is not as black as it looks in view of the excess profits credits included in the Revenue Act of 1942.

In advocating the new models, Rich said that he was not overlooking the possibility of an overload of obsolete goods in the trade-in market but that new designs should not be held back until these are disposed of. He suggested that 1942 models should be tagged "temporary" models.

Rich stated that production of '42 models should be a stop-gap policy and manufacturers should disown any desire to capitalize on a seller's market.



FOR Efficient Service

● Mueller Brass Co. dehydrators are provided with a special cone screen and other advantageous features which assure greatly increased efficiency in service (note illustration above.)

When a dehydrator is in operation there is a tendency for small particles of its drying agent to lodge on the face of the outlet filter. This condition will increase, particularly with dehydrators furnished with the old style flat disc screens, until the line is greatly restricted through clogging.

Restriction results in pressure drop, causing some evaporation of the liquid into gas. This mixture of liquid and gas causes trouble at the expansion valve. A decided temperature drop at the outlet of the dehydrator is an indication to the service man of this trouble.

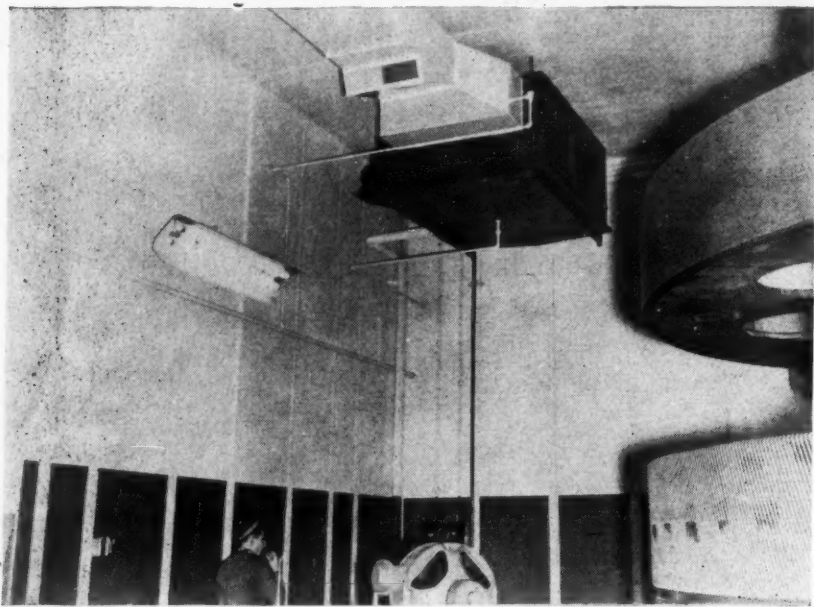
The Mueller Brass Co. improved dehydrator is designed to correct this condition. The cone-shaped screen, filled with pure wool, directs the fine particles of the drying agent to the outside of the base of the cone. Any particles that get through the screen will lodge in the wool filler without clogging, leaving the center free for the passage of the refrigerant.

Mueller Brass Co. dehydrators are furnished in all practical styles and sizes—heavy copper shell and forged brass ends soldered in place. Write us for illustrated descriptive literature.



MUELLER
BRASS CO.
PORT HURON, MICH.

Air Conditioning In Gear Hobbing



A fine example of how air conditioning assists in the precision manufacturing of vital war products is demonstrated in this application of a 5-ton Westinghouse air conditioning system which maintains room temperatures of between 68 and 70° F. during a gear hobbing operation. In this particular job a 146 inch marine gear is being hobbled at the Westinghouse Merchant Marine Plant.

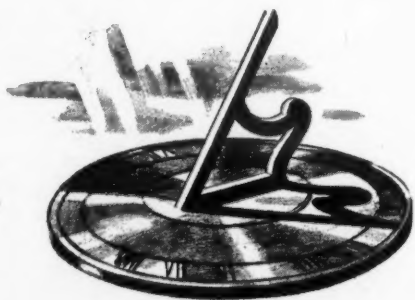
B. G. Krich Has Rapid Rise In Army Life

NEWPORT NEWS, Va. — Barney Gordon Krich, secretary of Krich-Radisco Inc., New Jersey electric appliance distributors, in civilian life, was promoted to captain in the U. S. Army on April 28, 1943.

Captain Krich is now Assistant Executive Officer to the Port Quarter-

master, and Officer in Charge of Quartermaster Operations Branch at Hampton Roads Port of Embarkation, Newport News, Va.

He was inducted into the Army Jan. 10, 1941; on Feb. 12, 1941, he rose to Master Sergeant. On July 15, 1942 he was commissioned as Second Lieutenant, after attending Officers' Candidate School in the Quartermaster Corps at Camp Lee, Virginia. On Sept. 16 he became first lieutenant.



It's a time for planning to be ready for post-war action

USAIRCO invites correspondence with men planning to enter the Cooling and Air-Conditioning Business...

ENGINEERS who seek a substantial future as factory representatives—DEALERS who want to work with a more inclusive line of air conditioning and comfort cooling equipment.

USAIRCO offers an unlimited opportunity in the postwar market.

Right now USAIRCO is busy producing Blowers, Washers, Coils, Unit and Blast Heaters—in fact all the tools of air conditioning—for the Army, Navy, Munition plants and airplane factories. USAIRCO products meet the exacting specification standards of the Armed Services and modern industry.

USAIRCO is a flexible organization. Large enough to afford a crack designing and engineering staff, receiving the benefits of modern production economies, yet of a size that permits of quick decisions and close cooperation with distributors and dealers.

USAIRCO is beginning its 20th year in business. It is one of the pioneers in the field of comfort cooling and air conditioning. Its products are widely accepted. Out of its war production experience its engineering and manufacturing have progressed and developed. USAIRCO will be ready for postwar business with a complete line of products tested and proven.

USAIRCO gives its representatives and dealers an opportunity to do business with the whole market—small retail establishments as well as large industries. Its products are engineered to fit the economy of a business, which means comfort cooling or refrigerated air conditioning that makes a profit for the man who owns it.

It is not too early to plan now for postwar Action... We'd like to hear from you—like you to know the complete USAIRCO story.

UNITED STATES AIR CONDITIONING CORPORATION

Manufacturers of the most complete line of air-handling equipment • Factory representatives in principal cities

NORTHWESTERN TERMINAL • MINNEAPOLIS, MINNESOTA



Concrete Gets True Test In Conditioned Room

Setup Is Designed To Control Conditions Within 2 Degrees

By Alfonso Cavarra, Materials Engineer, City and County of Denver

Specimens to test durability and strength of all concrete going into the construction of dams, highways, buildings and sidewalks by the City and County of Denver, Colo., are cured in an air conditioned room at the Materials Laboratory of the city government located at 811 Larimer Street, Denver.

To test concrete's "curing" propensities, the laboratory has constructed a storage room approximately 14 x 18 feet, in which a temperature of 70° F. and 100% relative humidity are maintained the year around with variations of no more than two degrees Fahrenheit.

Inside walls are lined with two inches of cork, having a mastic finish. The reinforced concrete roof (the original having been constructed of wood) is insulated outside with five inches of cork and covered with roofing paper. The door is two and one-half inches thick, made of sheet copper and filled with granulated cork. The inside walls are painted with special aluminum paint. All metal in the room is either brass or copper. The shelves are made of 2 in. x 4 in. pine and painted. All electrical conduits and light fixtures are moisture proof.

When the temperature in the curing room rises above 73° F. (maximum permitted by American Society Testing Materials), a Carrier refrigerating unit pumps a refrigerant through the air conditioning coils, thus cooling the air current as it passes into the room.

When the minimum temperature (68° F.) has been reached, the refrigerating unit automatically turns off and heaters turn on. The air current then circulating in the room is warmed. This cycle of alternate heating and cooling may be continuous. However, it has been found that in the warm summer weather the heaters can be dormant, and similarly the refrigerating unit can be switched off in cool weather.

The humidity is maintained by water being atomized continuously through a small nozzle, thus creating a dense fog. The blower which circulates the warmed or cooled air and also diffuses the water vapor operates almost continuously, inasmuch as the room has been kept in use in all except a few weeks for the past nine years.

To date the operation of the curing room equipment has been very satisfactory.

Westinghouse War Deliveries Up 38%

EAST PITTSBURGH—Delivery of war equipment from the plants of the Westinghouse Electric & Mfg. Co. during the first three months of this year has been increased 38% over the first three months of 1942.

Following the annual meeting of the company's stockholders, George H. Bucher, Westinghouse president, disclosed that net sales billed for the first quarter of 1943 amounted to \$155,649,355 compared with \$112,159,411 in the first quarter of last year.

More than 101,000 persons are now employed by the company, an increase of 22% over a year ago. Payroll for the first quarter this year totaled \$71,445,097—35% greater than for the first three months last year.

WPB Removes Further Bars To Expansion Of Frozen Foods

WASHINGTON, D.C.—Restrictions imposed by Limitation Order L-239 on the manufacture of paper boxes for packaging frozen foods have been removed by the order as amended on May 8 by the War Production Board.

Under the order, paperboard used in folding and setup boxes for packaging frozen foods was restricted to specified thickness. Heavy demand for such boxes has resulted in the development of new types. Today's amendment permits the use of the new type boxes, and helps the frozen food program.

An Odd Job For Modern Air Conditioning



Concrete test cylinders in an air conditioned room in the Denver Materials Laboratory are being used to determine the "curing" propensities of the concrete before it is used for construction of dams, highways, buildings, and sidewalks in the City and County of Denver.

Dept. Stores Turn To Repair Work, But Not Much on Appliances

NEW YORK CITY — In recent months the growth and promotion of repair services in department stores, in connection with the nation-wide effort toward conservation of materials, has been noted in a survey issued by Meyer-Both Reports.

The expansion of these services as observed in three test markets of New York, Chicago, and Los Angeles, shows that the department store has become a consumers' general "fixit" shop. Repair departments equipped to handle a wide variety of repair work have been set up in many leading department stores.

The survey covers sixteen different types of repairing, from shoe, corset and jewelry repairs to clock, watch, electric appliance and household equipment repairs. Many major appliance and electrical repairs are sent directly to the factory, and others are

sent out. Some research on which stores should be asked to handle repair work was made also.

Shoe rationing has accelerated the volume of shoe repairing now being done; and umbrella repairs are being advertised extensively, the demands for this service being increased sharply by the restrictions on umbrella manufacturing.

Hosiery repair has been stepped up by the need for conservation of silk and nylon hose on hand; clocks and watches are being repaired at all of the three test stores. Reweaving departments have been set up in several New York stores, but this has not yet reached Chicago or Los Angeles.

Several stores are offering dry cleaning service for both apparel and home furnishings, and replating and repairing of silverware has been provided for in some places.

THAT "RECALIBRATOR" tells you two things about a gauge



1. GREATER ACCURACY AND STAMINA

When you find a gauge with the "Recalibrator" you've found a gauge that has behind it 75 crowded years of improving and perfecting gauge construction. Such a gauge offers the utmost in accuracy and stamina, with an outstanding service record to show how well it will meet today's greater responsibilities.

2. ACCURACY IS LOCKED IN

Nobody has ever found a way to build a gauge that can't be knocked or jolted out of adjustment. But Marsh has found the one basically sound way to correct such a gauge. A twist of the "Recalibrator" screw is all it takes, and the gauge is accurate again at all points on the scale. The ordinary "adjustment" the "Recalibrator" strikes at the root of the error—actually recalibrates the gauge by reestablishing the proper relation between the bourdon tube and the movement.

The "Recalibrator" is available on all Marsh Gauges, standard on all Marsh Dial Thermometers. You'll find the same kind of outstanding features throughout the broad Marsh line. Write for the big Refrigeration Catalog.

JAS. P. MARSH CORP.
2037 Southport Avenue
Chicago, Illinois

MARSH
Refrigeration Instruments

How G-E Established a Setup To Insure Adequate Appliance Service

Over 3,000 Service Dealers Appointed, 5,400 Trained; Maintenance Promoted

BRIDGEPORT, Conn.—With real appreciation of the service crisis facing the nation's owners of electric refrigerators and other appliances, General Electric has set up a thoroughgoing plan and an extensive organization to help meet the situation caused by the withdrawal of so large a portion of the nation's trained service men into the armed forces and war plants.

Under the direction of W. C. Noll, manager of the Appliance Product Service Section, Clint Ring of that Section, and J. W. Dunbar, Service Promotion Manager of the Appliance Advertising Department, this program is now running on a nationwide scale.

Broadening of the original plan, which was first set forth in April, 1942, has been made necessary by the growing consumer demands for service and the loss of facilities to satisfy these demands. Up-to-date reports on the progress of the plan summed up by Mr. Noll are as follows:

This Has Been Done

1. The flow of parts to keep parts stocks adequate has been maintained.
2. Franchised distribution responsibility, augmented by the efforts of dealers and distributors, has been continued.
3. Twenty-five authorized service dealers had been approved by May 15, 1942. By Jan. 1, 1943, 2,862

authorized service dealers had been appointed.

4. More than 5,400 men and women interested in service, dealers, distributors and utility representatives have attended more than 200 organized training meetings between June 1 and Dec. 31, 1942.

5. Four factory-operated Service Centers had been put into operation by April 1, 1942. By Jan. 1, 1943, 10 such stations had been set up.

6. Advances in shop methods and operation, and studies in successful service patterns through the publications "Product Man" and "News Graphic" have been distributed regularly.

7. Promotion of non-essential parts and services that might interfere with the successful prosecution of the war, or that might indicate a "business-as-usual" attitude, has been curbed.

8. The authorized G-E appliance service dealer has been nationally advertised in magazines, newspapers and consumer booklets.

9. An open-minded attitude in regard to the modification of existing rules or policies to cover special local service conditions has been thoroughly maintained.

The present structure of the G-E appliance service and supply depots embraces the entire nation, although most of its efforts are concentrated in the east.

Function of Service Centers

Ten factory-operated Appliance Service Centers, plus dozens of other service stations undertaking more specialized repair work, five shops solely for the re-manufacture of refrigerator units, three shops for the servicing of small appliances, 58 stations for handling of clock troubles, and others, comprise the network of the repair and service organization.

The Service Centers are separate entities which handle domestic and commercial service problems in the interest of dealer, distributor and utility. It is General Electric's intent to create more of these Centers wherever the need for them arises. The 10 existing Centers are located in Bridgeport, Los Angeles, Cincinnati, San Francisco, Atlanta, Chicago, St. Louis, Boston, Toledo and Cleveland.

Re-manufacturing Trebles

Growth in the re-manufacturing of refrigerator units has been extensive. This part of the business is now three times greater (in volume handled) than it was one year ago.

General Electric's field organization has expanded as the service problem increased. In addition to the hundreds directly employed in the G-E shops and Service Centers, it consists of 22 field representatives, including district managers, backed up by a large headquarters staff of specialists in all products and activities. The field men handle questions and policy matters concerning the trade, assist in the satisfactory adjustment of customer complaints, both commercial and domestic, and guard vital supply parts for their respective areas. Their biggest job today is the training of servicemen in the field, an activity more important now than ever before.

The need for authorized appliance service dealers was recognized early by Mr. Noll. In 1942 an extensive study of nation-wide dealerships was made, from which quotas of authorized dealers for all districts of the Appliance and Merchandise Department were established. At present a total of 3,000 qualified dealers are in operation.

Factory Training Efforts

Contact between dealers and the company is maintained by means of personal calls, bulletins, service training meetings, and letters to and from the main offices. Authorized dealers are easily identified by the Authorized Appliance Service Center window markers provided for each station.

A system of continuous service training has been established as the most effective solution to the problem of manpower. Training is con-

ducted through meetings, at which moves and slidefilms, large diagrammatic charts, pamphlets, manuals and guide books are used as a means of visual education.

The entire program has been based on concentrated courses dealing with individual products, supplemented with manuals and bulletins on all appliances. Schools to acquaint servicemen with major appliances have been conducted in hundreds of cities. In addition to discussing individual problems of servicemen, the meetings cover the present supply parts situation, future plans, fundamental electrical information and distributor items of interest to dealers generally.

Getting immediate appliance repair information to servicemen all over the country is the task of a number of product specialists at headquarters of the G-E Co. in Bridgeport, Conn. Their data is released in many forms.

Informing the Public

The public, too, is being trained in the care of G-E appliances. "Captain in the Kitchen," a use-and-care booklet, was distributed early in 1942. This formed the basis for a two-reel, full color movie of the same title. Seven small folders have also been prepared, each dealing with an individual appliance.

Two other motion pictures, "Don't Blame it on the Oven," and "Into the

Wringer and Out . . . With J. Smedley Sprout," have been greatly effective. The first movie explains the four important steps in satisfactory use of the oven, which are: proper recipe and ingredients, correct mixing, utensils and oven use. This film is designed to fit any type of oven equipment. It is supplemented by a booklet in color, of the same name.

"Into the Wringer and Out . . . With J. Smedley Sprout" instructs the housewife in the correct use and care of a G-E washer. It sets forth the 10 conservation points most necessary to the maintenance of satisfactory laundering in the home. Information regarding procurement of these films may be obtained from any General Electric distributor or representative.

It has been the aim of all advertising programs to keep America "electrically-minded," and to promote better living through wider use of home appliances. The war has necessarily lessened strong sales promotion, but confidence in the G-E company is being built up by a series of advertisements which tell of G-E contributions to a United Nations victory, and predict the better living conditions of the future.

Newspaper and magazine advertising has been mainly of an institutional nature, but none the less widespread. By radio, G-E sponsors a dance-music program and a news program conducted by a popular commentator. College paper advertising, the policy of advertising for America's youth, "House of Magic" shows, and educational motion pictures have been put before the public successfully.

It is the aim of the G-E company

to maintain good service throughout the duration, to keep appliances working, to make it possible for appliance servicemen to speed up and increase their work.

In accord with this policy, wartime window displays, penny mailers and blotters, newspaper advertising mats, booklets and special literature designed to accommodate local conditions, have been made available to the service dealer.

Plans Now Coming Up

Field meetings and stepped-up usefulness of "Product Man" will be continued in 1943, and a single handbook containing service material for all major G-E appliances will be published in early summer.

Eight proposals for taking best advantage of this program are suggested to dealers:

1. Tie to and support the whole program.
2. Encourage vocational schools for student training to help solve the manpower problem.
3. Advise customers where to get service in convenient locations.
4. Advertise and distribute manufacturers' booklets to promote the "care and conservation" plan.
5. Keep abreast of local service conditions, so that distributors and service companies may be of utmost assistance to the dealer.
6. Address women's clubs and materials that might be essential to the war effort.
7. Have representatives make minor repairs "on the spot."
8. Keep stock and cost records to be sure of using a minimum of material classes using material available from manufacturers.

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... your way of life! Every man interprets it a little differently, but to us all it means a car, a radio, a refrigerator; the right to those things that make our daily life pleasanter, more convenient, more exciting. We pledge you this—after the last shot is fired, Weatherhead will again help build for you these products as well as many new ones born in the war.

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Manufacturers of vital parts for the automotive, aviation,
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How WPB Looks at the Distributors' PD-IX

Supply Jobbers Are Told How Form Is Processed and Best Way To Use It

By Sterling A. Warren, Assistant Chief, General Supplies Section, Industrial & Hardware Supplies Branch, Wholesale & Retail Trade Division, WPB*

The war program has necessitated a great many changes in the manufacturing of various items that are used every day in your business. We have had substitutions and substitutions for substitutions. There does not seem to be any end to it at the present time.

The manufacturers, as I understand it, are not in this meeting, but I want to cover a few of their problems, because they are important, and I see both sides of the picture because I have the manufacturers come to me in Washington and I have you jobbers and distributors.

The war program has necessitated extensive curtailment in the distribution of certain supplies and equipment, and it has been necessary to make substitutions for materials that were formerly plentiful.

Everyone knows the importance of refrigerating and air-conditioning equipment in food processing, transportation and storage, and in the production of many items greatly needed for the war, including chemicals, explosives, and synthetic rubber. War production would be retarded and a serious loss of food supplies would occur if equipment breaks down and cannot be repaired.

It is expected that the increased use of fresh food, due to restrictions on canned and processed food for home consumption, plus our thousands of victory gardens, will make greater demands on transportation and storage refrigeration. Hence, the refrigeration warehouses and domestic refrigerators of this country must be kept in continuous operation.

*Address before the National Refrigeration Supply Jobbers Association.

First, I want to speak very briefly on the major problems that have confronted the manufacturers during the last year. Manufacturers of refrigerators and refrigeration supplies ran into more than their share of obstacles in gearing their industrial economy to an all-out Victory Program. Not all of the problems have been solved.

These manufacturers have produced and are producing today millions of dollars worth of war supplies for the military forces. Shrewd merchandising men who formerly devised many gadgets to tickle the customers' fancy have turned their talents to solving tough conversion problems. War workers have suggested ways to make more weapons in less time with less materials. Manufacturers have learned new businesses and workers have acquired new skills. Women are also doing their share in this great program. The president of one of the country's leading manufacturers of refrigeration controls told me that one of the most skilled workers machining small parts of bomb sights was formerly a strip tease dancer from Brooklyn.

With reference to the victory gardens and other things that will naturally make a great difference in bringing supplies from various manufacturers' shelves. I have had a lot of you men come to Washington and say, "You have cut our application and we cannot get it on specified ratings." I know the problem; I know it and I appreciate it and I am very sympathetic with you. I have one announcement today that I have been warned not to make, but I am going to make it anyway.

'More Sympathetic'—But

We have had to cut the applications. There are a lot of reasons, and I do not want to go into the why's and wherefor's of why we had to cut them. I will say this: From now on we will be more sympathetic, I will put it that way, provided, of course, you stay within the limitations of orders issued by the War Production Board.

When I say "more sympathetic" I mean that. I am very sincere in that. I do not want everyone to just all of a sudden make a new PD-IX and air-mail it to Washington because we had that experience in January.

In January it was more or less common practice for almost every well-organized business to have an inventory either at the end of December or the end of January, which meant that we had 17,500 applications in the branch on our high day. We are only equipped at the present time to process 2,500. You can imagine the backlog. I will tell you gentlemen that the girls worked and the men worked and they worked Sundays and they worked nights, and they are not down there for careers, as you probably all know.

I may apologize because the service has not probably been the best, but Uncle Sam, you know, has taken a lot of our men too. I guess we are not very essential to the war effort; none of us are in an over-all picture. It is very hard to secure personnel.

We have the same personnel problems that you do in your own business, and it is very hard to get men who have had experience in refrigeration and air conditioning field to be able to intelligently process these applications. Therefore, when you write letters and say that your application has been held up for two weeks or three weeks, I want you to bear in mind that we have our own little personnel problem; you have yours; we are all brothers under the skin in that respect.

Reasons for 'Slowdown'

There have been a great many conversion jobs that have more or less slowed down the delivery of certain articles on PD-IX applications. There are a great many factories today that made or manufactured refrigeration supplies and today they are devoting almost 100% to the direct war effort. These men have converted their factories many times at a very, very serious loss to themselves. They are also manufacturing and have been on instructions from the War Production Board certain civilian essential supplies we must have to complete and keep going the machinery that is existing at the present time.

Soon after Dec. 7, 1941, it was plainly evident that the time had arrived when more definite steps should be taken to control the flow of all critical raw materials, also essential finished goods which were then in the inventories of wholesalers, distributors, jobbers, dealers, retailers and branch warehouses of distributors.

Living in a democracy and enjoying the democratic way of living, it was fully realized that a plan would

They Gave the 'Inside' Story on PD-IX



Irving Alter of the Harry Alter Co., Chicago, got this swell candid shot of Sterling A. Warren of the Industrial and Hardware Supplies Branch of WPB when Mr. Warren was the speaker before the National Refrigeration Supply Jobbers Association convention. At the left (pointing) is Alex Holcombe, Jr., of Philadelphia, retiring president of the N.R.S.J.A. On the right is Joseph Ortell of the Consumers Durable Goods Section of WPB.

have to be formulated which would govern these materials, whereby the small distributors, as nearly as possible, would be on the same level as the big distributors. It is, of course, not only the duty of all to cooperate with our government in this effort, but should also be their earnest desire.

The Distributors' Branch

About a year ago distributors and jobbers could be correctly termed as the "forgotten men." There was actually no branch, division, or section to which they could turn for guidance on priority assistance to secure supplies. In January 1942 a small group was organized as a section with the Production Requirements Branch. The entire personnel consisted of five people. I do not believe any of you realize the obstacles that we encountered in the beginning. Many people in the War Production Board believed a distributor was a part of an automobile. Therefore, the Distributors' Branch was organized to accomplish three important objectives.

The Distributors' Branch is now known as the Industrial and Hardware Supplies Branch of the Wholesale and Retail Trade Division, but the objectives remain exactly the same.

(1) To administer the Suppliers' Inventory Limitation Order L-63, thereby controlling and equalizing the present and future inventories of all distributors affected.

(2) To recommend priority assistance on essential materials through the medium of PD-IX application; thereby aiding in the replenishment of distributors' depleted stocks.

(3) To act as a headquarters for

all distributors' problems pertaining to the War Effort including vital civilian needs and priority regulations.

The PD-IX Application Form is the only medium in which a distributor or jobber can secure priority assistance for materials that he resells. Originally we were only granted priority assistance to 19 different types of distribution. As materials became more critical we added among others, lumber, drawing instruments and mortician, laboratory dental, motion picture, surgical, and many others too numerous to mention.

How Ratings Are Granted

For you information, we secure priority ratings assigned to these supplies from the End Products Branches. We have in our Directive Section ratings on over ten thousand different items. In this respect, functioning of this Branch is really quite similar to the distribution system itself. We realize the trend in rating is higher. Men working on these directive must check back frequently with other branches for changes in ratings.

The levels of ratings issued on PD-IX applications for various products very often must be stepped up with the changing requirements. Time does not permit me to go into great details covering instructions for completing this form, but I think most of you will agree with me that it is one of the simplest to complete among the forms and reports required by the WPB.

Generally speaking, no rating will be assigned on PD-IX for items not previously carried in stock by the distributor. Special cases will receive

(Concluded on Page 19, Column 1)

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ALL-INCLUSIVE PROFIT LINE

LIMITED NUMBER OF ALL TYPES AVAILABLE WITHOUT PRIORITY

For Immediate Shipment

The Sherer line of refrigerated display equipment is "tops" in construction and performance. Write for franchise details.

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- ★ DEHYDRATORS AND FILTERS
- ★ MANIFOLDS AND HEAT-EXCHANGERS
- ★ FITTINGS AND ACCESSORIES

Even though we are working "round the clock" on implements of war, every passing month strengthens our conviction that refrigeration equipment is so vitally essential that we should continue to allocate an increasing percentage of our manufacturing facilities, personnel and planning to our refrigeration products.

THAT'S OUR POLICY . . . continuing to do even a better job of supplying, as promptly as conditions will permit, more valves, manifolds, heat exchangers, dehydrators, liquid indicators, fittings and accessories to manufacturers, jobbers, installers and service engineers.

Write for Copy of Catalog R-2

SUPERIOR VALVE & FITTINGS CO.
1509 WEST LIBERTY AVENUE
PITTSBURGH, PENNSYLVANIA

How and What Material Is Obtained By Means of the PD-IX Application

(Concluded from Page 18, Column 5) attention. You can readily understand that there are not enough refrigeration supplies to go around at this time without granting priority assistance to new companies starting in business.

How Rating Is Used

The ratings assigned on this form may be used on two or more purchase orders provided that the total amount does not exceed the amount authorized. The rating may be obtained to secure materials that will be sold without ratings, provided materials are for essential needs. In some cases the approved application may specify that the merchandise can only be resold on specified ratings.

We are granting priority assistance on controls, valves, condensers, both air and water cooled, motor starting condensers, and many other items. For repair parts we are also granting priority assistance and I believe this is a very important point as a great many of the jobbers have been under the impression that the PD-IX form can not be used for repair parts.

No Allocated Materials

There are a few items for which you cannot use the medium of PD-IX application to secure priority assistance, as many types of supplies are rationed or allocated under M or L Orders issued by WPB. We have been working continuously to reduce the number of hours in which the applications are in process. But, we have the same personnel problem that you have in your own business. Uncle Sam is taking many of our men, and it is difficult to secure men who have had the proper background so that they can process these applications.

If the rating extended on a particular item will not secure reasonable delivery after you have contacted two or three sources of supply, it is permissible for you to ask for reconsideration of your case by letter, stating the facts, and I can assure you that it will be given careful and prompt consideration.

A False Rumor About A-10

While we are on the subject of ratings, many months ago there was a general misunderstanding, rumor or misinterpretation that the only rating you could secure on this form was an A-10. This statement has never been true, although we all agree that 10 months ago an A-10 would secure reasonable delivery on products that today may require an AA-2X or higher.

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If it's a refrigeration job... no matter how big or how small... we can supply Lipman equipment to fit the specifications. Let us work with you.

GENERAL REFRIGERATION DIVISION

Yates-American Machine Co.

Dept. AC-3, Beloit, Wis.

Model 153 Water-cooled Machine

Yates-American Machine Co.

Beloit, Wis.

At the start, we worked for and won a broad directive with wide authority to issue ratings up to the highest level provided, of course, we did not interfere with the vast military program. Although this directive is still in effect, it is cautiously used so that it will carry more weight when it is needed.

By exerting control at the wholesale level, we can determine how much or how little of the products made from critical materials will be permitted to filter through the channels of trade. Our work thus far is the reason "John Doe" can purchase a screw driver at the hardware counter without having a card punched or securing a priority. We also act as a sentinel in the WPB so that we may inject an element in many orders and regulations which often mean all the difference between workability and unworkability of the regulations.

Men Are Specialists

Every analyst without an exception has had many years of experience in his own particular field, either with a manufacturer, distributor or jobber. This is especially true of the senior analysts who are backed up by years of experience of prominence in their particular fields. Practical experience in his particular field of distribution is indispensable to the senior analyst, enabling him to spot discrepancies and also to treat with understanding the deserving applicant who has poorly stated his case.

I think it would be a revelation to all of you if it were possible for each and every one of you to visit Washington and meet some of these men and see how the cases are processed. However, there are not enough rooms in Washington for you to stay and for that and other important reasons, we have regional offices in Chicago and all other principal cities.

There may be many times during the next few months when you will find your inventory of critical items are very low, but there is only a certain amount of critical materials that will be available for essential civilian needs because the armed forces come first and foremost.

Use Judgment

We actually realize we are approaching, we will say, spring in Chicago, but it is spring almost every place else in the country at the present time. Probably, we have been a little bit too cautious; maybe we have not. That is still a debatable question. However, if your inventory condition on certain items which you need very badly in your business is especially low at this time, I would like to have you fill out a PD-IX application in Washington.

Now, that does not mean that the bars are down by any means. It means that we realize how serious it is; we realize fully that we must keep this equipment in operation. I am not going to promise anything; I never have. However, when I left, the Director of the Wholesale and Retail Trade Division, asked me to inform you gentlemen that he is very sympathetic with your problem and that he will go overboard as far as possible with other End Product branches in the materials allocating division of WPB to see that you get essential equipment for your own business.

'No More Cutting,' He Says

Effective immediately, with few exceptions, we will not cut the quantities on your PD-IX applications provided you are within the limitations of Order L-63.

I know your thought is how to stay in business. Your thinking on this should be expressed as to how you can better serve the War Effort through the facilities you have to offer. This unselfish and patriotic approach will help keep you in business. You will eventually automatically put yourself out of business unless you fully cooperate.

There is no selfish motive in enforcing orders as issued. They are for your protection. Analyze them fairly and with an open mind. If you do, you cannot but agree. The only way you will be able to stay in business is to do, first, all within your power to aid the War Effort; second, to place business as usual, selfish aims and profits, at the bottom of the ladder. An approach such as this will carry its own rewards—you may be sure of that. Your future depends on it.

In all phases of our living we are

to be affected. Let's not fight the changes but be ever ready to bend quickly to new courses necessary to be pursued and adjust ourselves willingly, and gladly to any and all new conditions that may confront us. Remember we are all together in this situation. We cannot now think of ourselves alone, we must now think in terms of all.

The success of our fight for material for you will depend more than you probably now realize on the impression and belief of these controlling commodity branches that our industry sincerely is not endeavoring to get merchandise just for sale for profit, but that it is earnestly endeavoring to work on low inventories, more rapid turnovers, and limiting sales to essential war industries and civilian needs.

Up to Jobber to Control Flow

I say again that we must by acts and deeds drastically control our sales of merchandise to only the War Effort or most vital civilian requirements. Your patriotism can be measured by your willingness to forego a sale that will take even a small essential item out of a vital spot.

Just as news and reports get to the ears of the commodity branches and the Army, Navy Munitions Board as to how the distributors of the country are responding to this plea, just so will the allotment of merchandise for distributors in the future be governed.

Your future is in your own hands. Keep the industry clean. Be your brothers' keepers. A few violators may bring even more stringent rules and regulations that will cause increasing hardships to all, even those who are endeavoring to do right.

K. T. Keller Lists Refrigeration as 'Essential War Product' in Speech

NEW YORK CITY—Refrigeration equipment to protect food in army camps is one of a long list of "essential products" manufactured by the Chrysler Corp., K. T. Keller, president, told an audience of bankers, business men, army officers and publishers here recently during a talk devoted mostly to economic adjustment.

"We make the refrigeration that preserves the soldier's food," Mr. Keller said. "We make the stoves on which his meals are cooked and the stoves that heat the barracks and tents in which he lives. We make thousands of duralumin forgings and castings for all types of airplanes and aircraft purposes. We make tanks and trucks to haul the soldiers. We make bomber fuselages for the Army, and sections of bombers for the Navy," Keller said, and named many other articles made by Chrysler to fill war contracts.

In answer to the question, "What about post-war plans?" Keller said, "Our only post-war plan is to win the war and win it damn quick."

Keller thinks that if we keep our minds on the fact that we are in this vessel on the economic sea, and sail it according to the charts, weather, and conditions, then this nation can go into its post-war effort with the same enthusiasm and the same desire to do a service to the 135,000,000 people that we are exhibiting in this war effort, and that industry is giving to this war effort.

"Competitively," he said, "I think we will be strong. We will have strong competition, and why shouldn't we? We certainly are having strong competition today. This is a highly competitive business, this war, and perhaps that is one of the reasons why the automobile industry is today doing such a good job for the nation, because it is a competitive industry."

Our service on all properly rated orders will surprise you. Prompt shipments, parts, supplies, tools, tubing.

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Already American mass-production has doomed the Axis.

Here is just another proof of it: The coveted Army, Navy "E" has been awarded to the employees of Oakes Products Division, Houdaille-Hershey Corporation, "for outstanding achievement in producing war equipment."

ing achievement in producing war equipment."

We take this means of letting the readers of *Air Conditioning & Refrigeration News* know about it—not as a matter of vanity, but as deserved tribute to our own co-workers, and to the wonderful men and women on vital production lines, throughout all American industry, who, every hour, are bringing the day of victory nearer and nearer.

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HOUDAILLE'S PEACETIME PRODUCTS: Houdaille Hydraulic Shock Absorbers for Automotive, Railway and Industrial Equipment * Bumpers and Grille Guards * Ignition Locks * Brake Levers * Air Cleaners * Crankshafts and Camshafts for Aircraft, Automotive and Marine Engines * Aircraft Landing Struts and Shimmy Dampers * and many other precision-made parts for the Automotive, Aircraft, Electrical Refrigeration, Radio and other industries.

*Pronounced "HOO-DYE"

Women Are Going To Be a Lot Different After the War - - As Customers, At Least

They're Going To Be Much Smarter About Mechanical Contrivances, Reasons Arthur Hirose

By Arthur Hirose, Director of Promotion & Market Research, "McCall's" and "Redbook" Magazines*

In the post-war period we'll have prosperity only if we have reasonably full employment. We have the plant capacity—greater than it's ever been. But what products can fill those gigantic factories to capacity and cause full employment?

The answer, perhaps justifiably over-simplified is "Products that people want and are willing to buy."

It is people who will or will not buy those products. It's people who will determine the extent of factories' post-war output and employment. Therefore, the most important phase of post-war planning is to know or intelligently speculate what the war will do to people and to their wants and desires. If we know this, we'll be able better to predict what products they'll buy and how many they'll buy.

This war is making physical changes in people—changes in ages, sex distribution, income, marital status, where people live, etc. The war is also making mental, social, spiritual changes in people—changes in their wants and desires. Let's examine these two kinds of changes:

Ages—Last year more children were born in the United States than in any year in our history. That is a result of the war. But if the war lasts much longer, marriages and births are both bound to decline as more and more millions of our men are in Europe, Africa, Asia, and Australia and not at home.

Young people of all age groups won't bulk as large in our post-war population as they have in the past. Bear in mind that our Secretaries of War and the Navy warn us that casualties are bound to be high as our armed forces invade Europe. The job of policing Europe and Asia,

*From a talk given to the Associated Printing Salesmen, New York.

when the war is over, may retain in military service millions of young men, for a year or more.

So one effect of the war on post-war markets in America is that we'll have fewer men whose ages fall between 18 and 45. And we won't have with us, immediately, as many small children as there might have been, had 11 million men not been in the armed forces.

But our older folks will be with us during the war and in the post-war period. They will be more important in every way. Products for older people should therefore loom large in the post-war period. Off the bat such products for older people would include labor-saving home appliances, quiet and gentle games, books, vacations to Florida and California, patent medicines, etc.

Women Get the 'Know-How'

Distribution of Sexes—Casualties in war will be largely men. This will leave women in a more important place in the post-war period than ever before. Women are coming into their own in this war. Sometimes we may think, rather ruefully, that women are also coming into more than their own.

There were Army nurses in other wars. Even the Navy in the last war had yeomanettes—gals in uniform who were stenographers and clerks. But the last war had nothing like our WAACs, our WAVEs, our SPARs—hundreds of thousands of them. Yet even without the WAACs and the WAVEs, women have leaped generations ahead in slightly over a year. There are few jobs in war industries today in which you don't find women. They're doing spinning and stamping operations in factories. They seem to have taken over all the light work in factories. But in addition women are running cranes and hoists.

They're working on railroads. More significantly, they're doing men's peace-time jobs. They're driving taxis. They're replacing men clerks in stores. They've found their way into auto service stations.

Some 30% of the workers at Henry Ford's Willow Run plant are women. In America there were 15 million women at work at the beginning of 1943. By the end of the war that figure will have risen to 20 million women. Women are in industry to stay. They are joining labor unions and will have a large voice in the operation of those powerful pressure groups.

The fact that women are in men's jobs today is not so important. In many cases men can do these jobs better and will probably take over again when they come back. The important thing about women in this war is their increased knowledge. Now they know men's jobs. They know manufacturing processes. They know how to make things. They know how to repair them. They know quality. Think what this added knowledge is going to mean in the post-war period for which we're planning.

Learn the Mechanical Angle

Just take women's new knowledge of mechanical things. Do you think the woman who's run an automatic machine in a factory is going to be content to do her housework manually when the war is over? There'll be the greatest demand by women for automatic household equipment, in the new world after the war. It's a revolution that will hit every room in the home, from cellar to attic.

Women will see no reason why a furnace can't tend itself. There's no such job as throwing coal into a furnace in a factory while a woman is trying to get another job done. Automatic washing machines will be the only kind women will want. In a factory, tools are where the job has to be done. Why then will a woman be content to lug one vacuum cleaner around from room to room and from floor to floor? She'll probably want a vacuum cleaner in the basement with a suction outlet in every room in her home.

Boom for Air Conditioning

Her war-time factory was air-conditioned and properly lighted. She'll want the same thing in the home. Adequate electrical wiring was essential to work in the war plant—she'll insist on it in the home. When women get into their post-war kitchens, they will want new products.

They'll want better refrigerators, with storage for all kinds of food. They'll want ranges that have time and temperature controls for more kinds of cooking. Peeling vegetables, washing pots and pans, endlessly straining and stirring things will be inconveniences of the past. Women will want jobs done faster, too.

Women shopping in the post-war period will be an amazing spectacle. Poor gal, in pre-war America women bought only 85% of all consumer goods. The other 15% was bought by her husband on the theory that he was the only one in the family who understood such intricate mechanisms as an automobile or a heating plant. But can you picture Rosie the Riveter or the gal who grinds the cylinder head of a jeep, standing meekly by if hubby attempts, all by himself, to decide which brand of car or refrigerator to buy for the family?

Rationing Smartens 'Em Up

"But," you may protest, "all women are not going to work in defense factories during this war." Right you are, but don't forget that women shopping in a war economy and living in a war-time economy are having forced on them in a short time an education in buying and using things that such organizations as Consumers Union and Consumers Research, in their wildest pre-war dreams didn't think could be achieved in a generation.

Women who before the war never knew whether sweetbreads were cow's glands or something else can now tell you where every cut of meat comes from and how many points each cut takes in meat rationing. Women who never knew whether a can of peas held 10 ounces or 20 ounces, now know the relative con-

tents of a can of peas and a package of quick-frozen peas.

Women who bought just sheets, now know, sometimes from bitter experience, that there are such things as thread count and tensile strength which affect wearing qualities. Women are reading labels. Women are doing comparative shopping of their own. Women are looking at the construction of shoes carefully before spending their precious coupon No. 17.

Gals who once helplessly called in the repair man when the vacuum cleaner didn't run well because the bag was full of dirt, now take the cleaner apart and make it run again. Women are adjusting pilot lights on gas ranges, putting the cords on electric irons, learning tricks in stretching fuel.

Hence one of the most important changes in people, as a result of the war will be the new influence of women and their greater effect on how merchandise is made, distributed and advertised.

Baby Crop Booming

Marital status—Here is another condition of people that will affect the post-war market for goods and services in America.

The post-war period will see many young people, married during the war but unable to set up housekeeping, on the way to achieving their goal. This will mean houses, home furnishings and all the things associated with a home.

While marriages have been accelerated by the war, there'll be a period in which millions of young men will be out of the country and won't be able to get married. After the war, the marriage rate will rise again and so inexorably will the birth rate. Marriages and babies will enlarge the market for all the products that have to do with homes and families.

Income Levels Higher

Income—War-time prosperity, generally speaking, cuts down the rich and moves millions of the lowest income people into the middle class. After the war the great and expanded middle class will be the big market.

Don't jump too hastily, though, to the conclusion that all merchandise, or the most of it, will be medium-priced, in the post-war market. To be sure there will be less call for high-prices, luxury items and there'll be less market, let's hope, for the cheapest and shoddiest products. But prices may well be higher than they were before the war. Consider the case of the factory that's been paying its workers a dollar an hour. It won't want to cut wages to 50 cents an hour, even if the labor unions would permit it. Added labor costs will mean added material costs and will have the tendency to boost the price of civilian products above their pre-war levels.

Especially interesting to such in-

dustries as the appliance business will be those families where both husband and wife will be working after the war. Here there will be a greater need for labor-saving appliances and other products because the wife will be away from home many hours a day. Likewise these families with two bread winners will be important because of their two pay envelopes.

Post-war America may not necessarily be a nation of high net consumer income. Don't bank on it too much. This is an expensive war we're engaged in. We'll be paying the bills for a long time. This means that taxes will continue to be stiff, even when the war is over. We may have post-war deflation. Such deflation would affect us all, but especially would it hit the labor and farm groups.

Big City vs. Little Town

Population Shifts—This is another physical condition of people that will affect post-war markets. The war has caused some population shifts. Certain cities have had inrushes of population. Other communities have lost population.

Where will people live after the war? What is likely to happen to cities, towns, villages and farms after the war?

Cities will not grow at the rapid rate most of them did before the war and as many of them, like Detroit, have done during the war. Look for decentralization of factories, stores and homes after the war.

Transportation—A number of factors will contribute to this spreading out of population. Improvement in transportation will be one of the greatest influences. History shows that new settlements were created when river transportation came to the United States. But still more communities came into being with the advent of the "iron horse" or the railroads. We thought we lived in the automobile age before the war, but I suspect it's a case of "we ain't seen nothing yet." The number of passenger cars in America grew as automobiles became cheaper, until we had about 28 million of them on the road. But war-time scientific developments will probably give us, not right after the war, but in a year or two, a lighter, roomier car.

Using the new higher octane gases developed in the war, these new cars will probably go three times as far on a gallon of gasoline as the car of today. With millions more people owning cars, there will of necessity come bigger and better road systems. This will further spread out the population of the United States. Then, too, the airplane will be further perfected as a means of transportation.

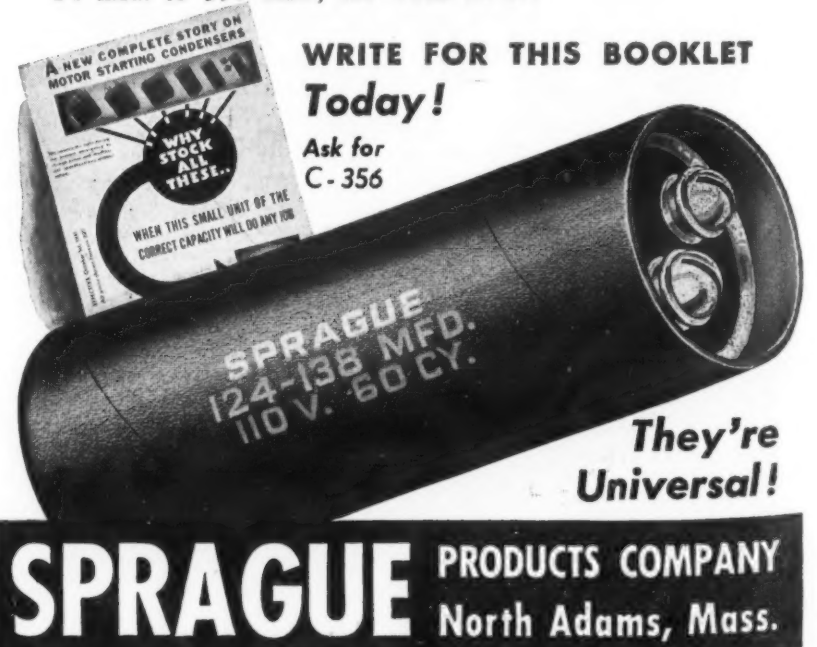
Communications—This decentralization of population won't be a hardship because of better communications—more dial telephones, commercial radio, and television.

We can deliver MOTOR-STARTING CAPACITORS

Exact duplicate motor-starting capacitors? Sure—Sprague offers the finest, most complete line—BUT: Why not follow the lead of prominent motor manufacturers and standardize on the small Sprague 3500 Series UNIVERSAL Types? They meet ANY requirement up to their rated capacities. They fit anywhere. They're more dependable than the big, old-style units they replace. They're available for PROMPT SHIPMENT in capacities from 24 mfd. to 350 mfd., 110 Volts A. C.!

WRITE FOR THIS BOOKLET Today!

Ask for C-356



WANTED YOUR POST-WAR PROBLEMS

Here is an opportunity to work direct with a leading refrigeration manufacturer and their staff of engineers in designing your post war refrigeration units. The possibilities are limitless in developing greatly improved products, particularly along the lines of domestic refrigeration, frozen food handling and sub-zero industrial applications. A great variety of new materials, processes, advanced technical and engineering skills, born of the war, are at our command to aid you in your post war thinking.

We solicit inquiries on your post war problems as well as your present essential requirements and offer our engineering facilities in working them out.

Address all inquiries to
TECUMSEH PRODUCTS COMPANY

Tecumseh

Michigan

Is Small Business Washed Up? A Reply to Ted Quinn's Book

(Concluded from Page 1)

that those in authority inevitably seek to perpetuate that authority—and themselves in power. They restrict competition, strangle newcomers and smother new ideas. In your beautifully logical solution to our economic and political ills, might you not be proposing something which would turn out to be worse than the unbridled competition which you seek to supplant?

On page 40 you state, and rightly, that "the old is a habit, safe and comfortable, and the new an unattractive effort-requiring risk." And history bears you out. In every instance where "self-perpetuating" authority has gained control, arteriosclerosis eventually sets in, the organization weakens from within, and finally falls or is pushed over.

On page 147 you argue that (in defending monopoly) "individuals, given proper encouragement, within any company will always propose new ideas."

Yes, but will they be accepted at the "top level" (as they say in Washington) if such ideas—no matter how progressive or contributory to the public good—might disturb the comfortable status quo that the monopoly has achieved? Won't they be weighed against the cost of retooling, against the cost of junking previous distribution channels (including disadvantage for old friends), against risk?

ARE 'SQUATTER'S RIGHTS' DIVINE RIGHTS IN AMERICAN INDUSTRY?

For example: On page 87 you "point a finger of moral and social disapproval at those large corporations which, having established themselves in some one industrial field, take advantage of their financial position to move into other related lines, where they contribute nothing and often cut prices ruinously."

You would argue then, that DuPont, having discovered Nylon, should not have moved into the silk field against the Japs?

Following that same line of reasoning, your proposed Economic Senate might have choked off your own career, which had its meteoric rise in electric refrigeration. Might not Frigidaire, Kelvinator, and Servel, for instance,—yes, and Worthington, Frick and Carrier—have protested against the great General Electric Company for invading their staked-out field of refrigeration? They had pioneered the field, had taken the early troubles and grief, when you came along with your Monitor Top, your three-year guarantee, your "Not One Cent for Service."

Again on page 111 you mention "the bad practice of using capital to go into unrelated lines of business." Well, why not? If you have something (as G-E undoubtedly did in its sealed unit) why not add it to the wealth of society?

Isn't your emotion in this case a reflection of the idea that competition—big or small—is a nuisance? And isn't that a valid indictment of monopoly?

Should any one company, or group of companies, command an entire industry by divine right? Under self-perpetuating monopoly, that all too often happens. New ideas, new patents, new methods, are sometimes stifled by monopolies because they (1) would force them to change their comfortable, habitual ways of doing things, and (2) they might threaten the perpetuation-in-power of the monopolistic managers.

BIG CORPORATIONS MAKE BIG CONTRIBUTIONS TO PROGRESS; BUT SO DOES INDIVIDUAL GENIUS

Yet change, progress, new methods, better products, are the lifeblood of the free enterprise system. True, the "captive" laboratories of the giant corporations make remarkable contributions to progress. On the other hand, so have the unheralded inventors in alley shops—the Fords, the Edisons, the Goodyears, the DeForests.

Any system for postwar perfection should include a better-than-even-break for the small businessman with ideas. If he's good enough, the big corporations can buy him out—at great reward to himself (consider George Hughes and his electric range)—or he can fight his way upward to his own place in the sun, like Henry Ford. As you say on page 115: "It is more difficult and expensive to sell unknown brands, and when a company or a brand becomes well and favorably known it doesn't remain small."

One would gather from your reasoning in "Liberty, Employment and No More Wars" that the chief sin of small business is that of cutting prices. You imply that small business men must cut prices to gain a toehold, that big corporations invariably undercut these prices, and then the little company goes broke.

That would be a sad story if it were the norm. But often the little company introduces a new idea, builds a better product, or fills a neglected need. Not all little businessmen go broke. And many of them charge higher prices.

Take ourselves. One "competing" publication sells for \$2 a year, one for \$1 a year, and two others give their magazines away, whether the recipients want them or read them or not. We

charge \$4 a year to all comers, including you, Ted—despite the fact that your agency places a lot of business with us. And our publication is the only one in the field which has a rising circulation curve at this time, and the publication which is in the healthiest condition. Note: ours is the smallest corporation of the lot.

Is it a law that all the big corporations must meet price cuts established by competing small ones? Of course it isn't. The OPA recognized that fact in establishing different price ceilings for chain stores and independents.

You yourself state the case for small business admirably on page 119 when you write:

"The best argument for small business, that is, decentralized business, is that owners, managers and workers can know each other, be human and make social adjustments around their daily work which will give it meaning and purpose."

That's wonderful. "You can say that again."

WE BELIEVE IN BIG BUSINESS; BUT SMALL BUSINESS HAS ITS PLACE

Mind you, we do not hold with those who see only evil in big business. (For proof, read our exchange of correspondence with a big-business-hater on page 10 of this issue). Big business, large corporations, contribute tremendously to the advance of civilization. We're all for them.

But . . . BUT. We can't go along with the theory that all business must be swallowed up into huge corporate structures, that centralization of everything is a trend which cannot be resisted, that the new and small entrepreneur is essentially a price-cutter and cannot survive, that only the big deserve the fair, that economic controls must be centered in the hands of a self-perpetuating few, that competition is a self-inherent evil.

Again we quote your remarkable book (p. 69):

"There is undoubtedly a deep-seated relation between the central idea of political and economic liberty, individualism, on the one hand, and the Christian religion on the other. Individual self-respect is certainly the essence of Christianity. At all events, they seem to have grown up together and to have affected mightily the later life of mankind."

On that confession of faith we rest our case. You have stated our case better than we ever could.

Ted, you have written a tremendously absorbing book. The small segment of your thinking that we have sought to challenge, we believe has been refuted by your own statements. That, in itself, shows how fair a man you are!

Judging by the letters we receive, we know that a great many readers of this publication are seriously, cerebrally concerned with the kind of world into which we are going to emerge following the not-too-distant total victory. Every one of those thoughtful readers should read your book.

However they may react to your thought on the virtues of monopoly, we feel sure that they will profit by reading the solid thinking embraced in your back-of-the-book political planning.

GEORGE F. TAUBENECK,
President of a Healthy
Small Business

New Meat Preservation Techniques Patented

WASHINGTON, D. C.—Three new kinds of refrigerating techniques in the preservation of meat on which patents were issued recently are reported by the United States Patent Office.

The first patent was issued to B. E. Williams and L. L. Caldwell jointly on their improvement on whole-carass jobs. By hanging brine-soaked carcasses covered by heavy paper bags, rather than in a naked condition, in the chilling room, the self-starting tenderizing process in the tissues of the meat is hastened, yet no dangerous spoilage is possible because the chilling of the outer surface is slowed down and the whole piece cools uniformly. This method is a time saver inasmuch as, ordinarily, a naked carcass must hang for weeks while tenderizing takes place.

The third patent went to C. T. Walter, also of Chicago, on quick-freezing of poultry. Freezing cold air is blown into the cleaned-out cavity of a bird and the chilling takes place from the inside out.

Carrier's Shipments In March Set Record

SYRACUSE, N. Y.—Shipments out of the Carrier Corp. factory for March, 1943, reached a record, with \$1,668,000 of products being shipped. This is at the rate of \$20,000,000 per year. Shipments for the first five months of the fiscal year were at the rate of \$15,695,000 per year, also a record.

Hotpoint Continues 'Buy Bonds Today For New Postwar House'

CHICAGO—"Get Aboard the Bond Wagon" is the featured slogan of the current Hotpoint advertising program, the Edison General Electric Appliance Co., Inc., announces.

Characterizing the "Bond Wagon" campaign will be the same theme of "buying war bonds today for home building tomorrow" that distinguished Hotpoint's winter advertising series.

W. A. Grove, Hotpoint sales promotion and advertising manager, says that electric appliance dealers and public utility companies will be allowed individuality in building up their own advertising programs to suit local conditions. This freer method makes no attempt to force "canned" copy, but attempts to sell the theme itself. Original advertising copy combined with illustrations, captions, and other helpful material provided by the manufacturer proved effective last winter, Grove states.

"Home planning files," Hotpoint prospect finders, which were handled during the winter campaign by dealers, but not advertised, will be featured publicly this spring. A "home planning file" sells for 25 cents and is an incentive to future home builders to keep up with new phases of homebuilding by filing clippings and sketches.

A natural reaction to "Bond Wagon" plans for the future, Grove relates, is the interest that has been shown by architects, builders, material, lumber and home furnishings companies because of an existing link between the building industry and the hundreds of thousands of families that will want to build homes after the war.

"Electricity as a home servant is being introduced to its employers at the rate of several thousand a day, and when the men come home from war they are going to build homes with kitchens that will perform like the kitchens they saw in army camps, aboard ship, and in navy bases, where electric ranges, ovens, grilles, and galleys operated with perfection," says Grove.

According to G. H. (Rock) Smith, general sales manager for Hotpoint, selfish interest will never take the place of unselfishness and altruism but, he says, "Our experiences in this campaign have taught us that folks find it a whole lot easier to express their patriotism in the purchase of war bonds when they have pointed out to them that their patriotism is going to be rewarded after the war."

Ten nationally known magazines will carry full-page, four-color Hotpoint "Bond Wagon" advertisements.

EBCO Electric Water Coolers

A COOLING TONIC FOR FATIGUE



**Properly Cooled
Drinking Water is Vital on All Fronts**

On the production front . . . the fighting front . . . the business front . . . or aboard ship—clear, clean, cool drinking water makes a world of difference in the morale and energy of every individual. Medical authorities emphasize this fact.

That's why EbcO Electric Water Coolers are recognized "allies of production". They deliver invigoratingly

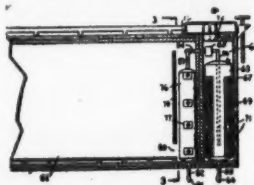
cool water 24 hours a day—month after month—year after year—at minimum cost! EBCO'S advanced production-line manufacturing methods assure top-quality construction in every detail—as shown by 20 years of pioneering leadership in the electric water cooler field. Submit your priority requirements to EBCO today!

The EBCO Manufacturing Company
401 W. Town St., Columbus, Ohio

PATENTS

Weeks of April 20 & 27

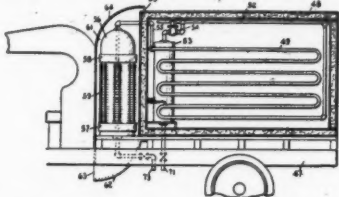
2,316,791. REFRIGERATING SYSTEM. Oliver C. Irwin, New York, N. Y., assignor, by mesne assignments, to Standard Cap and Seal Corp., Chicago, Ill., a corporation of Virginia. Application Sept. 12, 1932, Serial No. 632,741. 8 Claims. (Cl. 62-93).



5. A refrigerated unit comprising a body, an evaporator of an absorption refrigeration system mounted in the body and having refrigerant storage capacity, an absorber for the spent refrigerant mounted outside said body, a pipe connection from the evaporator to the absorber, and a regulator valve mounted in said pipe connection so as to regulate the temperature of said body in accordance with the pressure in said evaporator.

2,316,792. REFRIGERATING SYSTEM. Oliver C. Irwin, New York, N. Y., as-

signor, by mesne assignments, to Standard Cap and Seal Corp., Chicago, Ill., a corporation of Virginia. Application Sept. 12, 1932, Serial No. 632,741. 8 Claims. (Cl. 62-93).



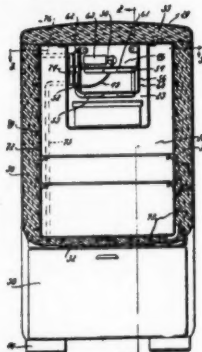
1. A refrigerated truck comprising a chassis having a driver's cab and an insulated body carried by the chassis, an evaporator carried by the body, cooling coils connected to the evaporator and disposed on the interior of the body, an absorber of an absorption refrigeration system mounted outside of the body and connected to the cooling coils, means whereby the evaporator and absorber may be periodically re-supplied with fresh refrigerant and absorbent respectively, and a chimney surrounding said absorber to direct air thereover.

2,316,821. REFRIGERATION APPARATUS. Lawrence A. Philipp, Detroit, Mich., assignor to Nash-Kelvinator Corp., Detroit, Mich., a corporation of Maryland. Application Nov. 25, 1940, Serial No. 366,990. 5 Claims. (Cl. 62-116).

3. In absorption refrigeration apparatus including a generator in which refrigerant vapor is expelled from absorption liquid, a condenser in which the expelled vapor is condensed, an evaporator in which the condensate is evaporated, and an absorber

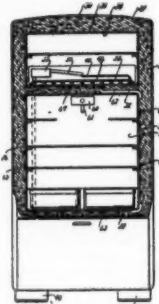
into which vapor passes from the evaporator and connected to receive absorption liquid into which the vapor is absorbed, an open frame comprising metal members secured together to form a rigid frame structure, the refrigeration apparatus being mounted on the frame structure with the absorber being secured directly to certain of said metal members and the evaporator being located above and mounted on the absorber.

2,317,061. REFRIGERATING APPARATUS. Lawrence A. Philipp, Detroit, Mich., assignor to Nash-Kelvinator Corp., Detroit, Mich., a corporation of Maryland. Application Nov. 25, 1940, Serial No. 366,990. 5 Claims. (Cl. 62-116).



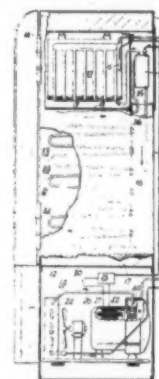
1. Refrigerating apparatus comprising a cabinet having an inner liner forming a food compartment, a secondary refrigerant evaporator surrounding a major portion of said liner for the absorption of heat through walls thereof, a casing within the food compartment to provide a freezing zone, a primary refrigerating system including a freezing portion within said freezing zone and including a condensing portion associated therewith, and a secondary condenser associated with said primary system for condensing evaporated refrigerant in the secondary evaporator in such a manner that the secondary evaporator operates at a temperature for cooling the air in the food storage compartment to the desired temperature with little if any moisture forming on the inner walls of said liner and said freezing portion being arranged and operated to cool the exterior walls of said casing somewhat below the temperature of the liner walls so that moisture forms chiefly if not entirely on the exterior walls of said casing.

2,317,082. REFRIGERATING APPARATUS. Lawrence A. Philipp, Detroit, Mich., assignor to Nash-Kelvinator Corp., Detroit, Mich., a corporation of Maryland. Application Dec. 6, 1940, Serial No. 368,945. 1 Claim. (Cl. 62-116).



Refrigerating apparatus comprising an insulated cabinet having two sheet metal liners arranged to provide two compartments for the storage of food, a secondary refrigerant coiled evaporator secured to the exterior of one of said liners, a secondary refrigerant coiled condenser arranged on a single plane and secured to the exterior of the second liner, a primary refrigerant coiled evaporator arranged on a single plane in contact with the interior of said second liner directly opposite said secondary condenser and a sheet metal plate arranged to provide a support for objects to be frozen and to removably secure said primary refrigerant evaporator to said second liner.

2,317,104. AIR CONDITIONING. Paul B. Moore, York, Pa., assignor to York Ice Machinery Corp., York, Pa., a corporation of Delaware. Application Dec. 17, 1941, Serial No. 423,393. 6 Claims. (Cl. 62-129).



1. The combination with an air conditioner including a refrigerative evaporator and a fan for drawing air in contact with said evaporator and discharging it into a room; flow directing means controlling the discharge from said fan, said means being adjustable to vary the direction of discharge into the room and having a limiting position in which such dis-

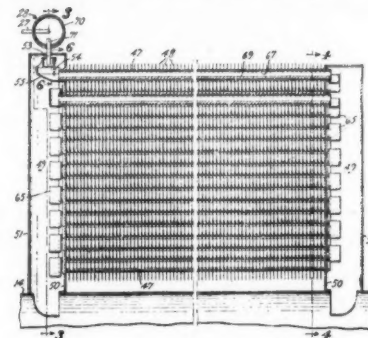
charge is closed; a normally closed damper controlling a secondary discharge from said fan leading to a point exterior to the room; and means operable by motion of the flow directing means to its closed position and effective in a limited motion range near said closed position to open said auxiliary damper from its normal closed position.

2,317,512. FOOD STORAGE RECEPTACLE FOR REFRIGERATORS. Delbert F. Newman, Schenectady, N. Y., assignor to General Electric Co., a corporation of New York. Application April 24, 1940, Serial No. 331,443. 4 Claims. (Cl. 220-35).



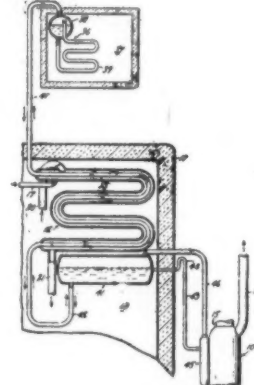
1. A food storage receptacle for use in refrigerator cabinets or the like, a wall of said receptacle being provided with an opening, a closure member for said opening, means adjacent said opening for pivotally supporting said closure member on said wall, said member having a laterally extending marginal flange engaging said wall adjacent said opening in the closed position of said member, said flange adjacent said supporting means having an arcuately extending portion at the free edge thereof, said arcuate portion being arranged to provide continuous engagement with said wall in the vicinity of said supporting means throughout the range of movement of said closure member, and means associated with said receptacle and said closure member for urging said arcuate portion into engagement with said wall, said urging means acting along a line extending through said pivotal support and the area of engagement between said arcuate portion and said wall so that said closure member will remain in any desired position within said range of movement.

2,317,234. REFRIGERATION. Albert R. Thomas, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware. Application Aug. 3, 1940, Serial No. 350,235. 15 Claims. (Cl. 62-119).



11. An absorption refrigeration system employing only refrigerant and absorption liquid as the active fluid components and comprising a generator, a condenser, an evaporator and an absorber interconnected for flow of refrigerant and absorption liquid; the system being operable at a partial vacuum with the refrigerant vapor formed in said evaporator passing therefrom at a high velocity; the system being of the kind in which ebullition of liquid refrigerant tends to occur with vaporization of such liquid in the evaporator in producing a refrigerating effect; said evaporator comprising piping having an inlet at one level and an outlet at a lower level and into which liquid refrigerant is introduced at the inlet, said piping providing a path of flow for liquid in all regions of which the depth of liquid is at a minimum and just sufficient to permit liquid to flow past successive regions in the path of flow; and means to cause liquid flowing through said piping to spread over a substantial area to form a liquid film at the inner surface of the piping, so that practically all of the heat transfer is effected from the exterior of the piping through the latter directly to said liquid film to cause substantially all vaporization of liquid to take place from said film without ebullition and violent boiling of liquid and without the formation of vapor bubbles below a liquid surface level.

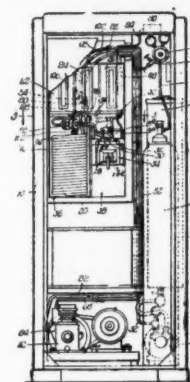
2,317,283. REFRIGERATION. Erik Sigfrid Lyngner, Stockholm, Sweden, assignor, by mesne assignments, to Servel, Inc., New York, N. Y., a corporation of Delaware. Application June 22, 1938, Serial No. 215,111. In Germany July 6, 1937. 28 Claims. (Cl. 62-125).



1. A method of heat transfer which includes simultaneously vaporizing liquid at a place of evaporation at an upper elevation and condensing vaporized fluid in a place of condensation at a lower elevation, collecting condensate at a place of accumulation, and intermittently stopping such vaporization of liquid and condensation of fluid and raising liquid condensate to said place of evaporation by trapping vapor above a surface level of accumulated condensate to exert force thereon, and thereafter releasing such trapped va-

por to said place of condensation to terminate the raising of liquid condensate to said place of evaporation.

2,317,484. COOLING SYSTEM FOR BEVERAGE VENDING MACHINES. William E. Richmond, Kenilworth, and Arthur D. Ames, Galesburg, Ill., assignors to Automatic Canteen Co. of America, Chicago, Ill., a corporation of Delaware. Application April 14, 1941, Serial No. 388,350. 4 Claims. (Cl. 62-141).



(Concluded on Page 23, Column 2)

Use CHICAGO SEALS
for seal replacements
A complete line in all sizes
CHICAGO SEAL CO.
20 North Wacker Dr., Chicago
UNIVERSAL COOLER
MARION, OHIO BRANTFORD, ONTARIO
WE SELL TO MANUFACTURERS ONLY
UNIVERSAL COOLER CORPORATION
Automatic Refrigeration since 1922

Continental
FARM LOCKER PLANT
SANITARY REFRIGERATOR CO.
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We Sell Thru
Distributors of refrigeration and insulation. Get particulars on our NEW
Master Food Conservator
the Modern way to Conserve food
Master Manufacturing Corp.
121 Main St. Sioux City, Iowa
300,000 Master Food Conservators In Use

"MOISTURE'S MASTER"
DAVISON'S
SILICA GEL
—USED IN ALL WELL-KNOWN DRYERS
—YOUR JOBBER CAN SUPPLY YOU

ALCO For Maximum Evaporator Efficiency
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PAR COMMERCIAL REFRIGERATION UNITS FOR PROTECTION OF VITAL FOOD SUPPLIES
See Your Par Jobber
LYNCH MANUFACTURING CORP.
DEFIANCE, OHIO, U.S.A.

AMANA Commercial REFRIGERATION
Modern Display Cases Coolers, Refrigerators
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Write for our 144 page catalogue on your letterhead.
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Exceptional design. Hot tin dipped welded steel construction with copper end connections (steel in F.P.T. sizes). Negligible pressure drop. Large screen area with easily removable screen. Light weight. Oil trapping prevented by installing on side or in vertical position.
ASK YOUR JOBBER FOR IT
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Guaranteed Equal to or Better than New
• Immediate shipment on any one of 225 parts, in every respect good as new or better. That's HASCO service, saving time and money for you and your customer! New material supplied where necessary is precision made, all items complete ready to install, packaged, labeled with factory part number.
Send for Illustrated Catalog and Price List
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Move Those Surplus Parts!
If you have oversized or obsolete inventories of equipment or parts, tell the industry about them through an ad in the NEWS. Buyers are anxious to obtain all types of repair and installation parts right now. Rates on request.
Air Conditioning & REFRIGERATION NEWS
5229 CASS AVENUE DETROIT, MICHIGAN

CLASSIFIED ADVERTISING

RATES for "Positions Wanted," 5¢ per word; minimum charge, \$2.50. Three consecutive insertions, 12½¢ per word; minimum charge, \$6.25.

RATES for all other classifications, 10¢ per word, minimum charge, \$5.00 per insertion. Three consecutive insertions, 25¢ per word, minimum charge, \$12.50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count.

EQUIPMENT FOR SALE

CARRIER CONDENSING UNITS. Brand new air-cooled; complete with A.C. motor and control. Packed in original crates. ¼, ½ and 1 HP. General Electric Motors. Brand new cradle base ½ HP. A.C. 110-220 volt. 1725 RPM. Available for immediate shipment. No priorities necessary. **GENERAL REFRIGERATORS CORP.**, 678 Broadway, New York, N. Y.

INTERNATIONAL HARVESTER Refrigeration units. Air cooled, methyl chloride, complete with control and 110-220 Volt 60 cycle motor: ¼ H.P.—\$89.50; ½ H.P.—\$149.50; 1 H.P.—\$174.50; and 1½ H.P.—\$212.50. Betz standard blower coils (unit coolers) 110 Volt. All copper coil. Model number indicates B.T.U. per hour per 1 degree T.D.: No. 233—\$77.00; No. 320—\$92.75; No. 400—\$99.50. All merchandise brand new in original crates ready for immediate shipment. No priority required from dealers and distributors. Prices are net cash with order FOB Saginaw, Mich., or 25% deposit and balance COD. **J. GEO. FISCHER & SONS, INC.**, Saginaw, Mich., Phone 2-4185.

FARM FREEZERS, frozen food cabinets, all sizes, reach-in refrigerators, display cases, vegetable cases, daily-wall-cabinets, Fedders diffusers, compressors, motors, mobile cafeterias for defense plants. To dealers only. Inspection on premises. **CONTINENTAL REFRIGERATORS CORP.**, 95 Madison Avenue, N. Y., MU. 3-5784.

EQUIPMENT WANTED

WANTED NEW or used refrigeration motors from ¼ H. P. to 1 H. P. A. C., 60 cycle. **NORTH TOWN REFRIGERATION CORP.**, 4716 Lincoln Avenue, Chicago, Illinois.

POSITIONS AVAILABLE

TO MAN with family looking for permanent and profitable position with long established manufacturer of commercial display and storage refrigerator equipment. This position is worth investigating. Our factory located in small progressive Michigan city. We desire individual with experience in refrigeration field with knowledge of low temperature application. Prefer man with college mechanical engineering background, who can supervise design and application of new refrigeration products and who can assist sales and engineering of present prime and sub-contracts on governmental work. This is essential industry. Position presents unlimited opportunity. Available immediately. In reply state qualifications and starting salary required. Box 1446, Air Conditioning & Refrigeration News.

LARGE MANUFACTURER wants experienced refrigeration field service men for Wisconsin and surrounding states to service conventional unit farm locker plants. Headquarters Fond du Lac, Wisconsin. Salary and expense account. Splendid opportunity now and after the war. State age and draft status in answering. Reply direct to **SANITARY REFRIGERATOR CO.**, Fond du Lac, Wisconsin.

POSITIONS WANTED

TEN YEARS' experience in air conditioning and refrigeration, heating, etc., as Sales Engineer, Department Manager, Sales Manager; 43 years old, draft status 3A (H). Experience covers sales, layout, application, supervising, wholesale and direct sales. Prefer Pacific Coast location, but will consider good propositions in other territories. Will give all references required, replies will be kept confidential. Box 1448, Air Conditioning & Refrigeration News.

The PIONEER FLUID DEHYDRANT
THAWZONE
HIGHSIDE CHEMICALS CO.
195 VERONA AVE. NEWARK, N. J.

RECORD COILS WATER-DEFROST
U. S. PAT. 2,219,393
REFRIGERATION ENGINEERING INC.
LOS ANGELES - CALIFORNIA

WAGNER MOTORS
for All War Needs
Wagner Electric Corporation
6441 Plymouth Avenue, Saint Louis, Mo., U. S. A.

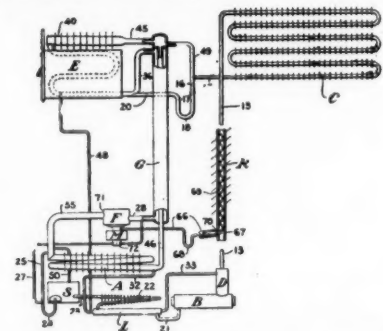
REFRIGERATION PRODUCTS
fedders
BUFFALO, N. Y.

Patents (Cont.)

(Concluded from Page 22, Column 5)

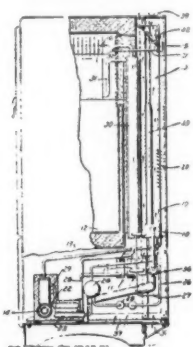
1. A cooling assemblage for a beverage vending machine having ingredient storage means, a mixing assembly, and a conduit connecting the ingredient storage means to the mixing assembly, comprising a refrigerating mechanism, means for storing refrigeration during inactive periods of the vending machine and means for concentrating the refrigerating capacity of said refrigerating mechanism on a part of said conduit near the mixing assembly during a period of vending activity.

2,317,517. REFRIGERATION. George A. Brace, Winnetka, Ill., assignor to the Hoover Co., North Canton, Ohio. Application Feb. 5, 1940, Serial No. 317,383. 19 Claims. (Cl. 62-119.5).



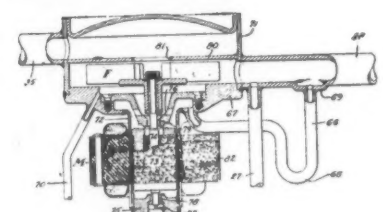
1. An absorption refrigerating apparatus comprising a boiler, a rectifier, a motor fan unit for circulating the mediums in the apparatus and a conduit connecting the bottom of the rectifier with the motor fan unit, said motor fan unit being so positioned relative to the rectifier that distillate from the rectifier flows through said conduit to the motor fan unit to lubricate the same.

2,317,519. REFRIGERATION. Curtis C. Coons, North Canton, Ohio, assignor to the Hoover Co., North Canton, Ohio, a corporation of Ohio. Application Sept. 29, 1938, Serial No. 232,272. 3 Claims. (Cl. 62-119.5).



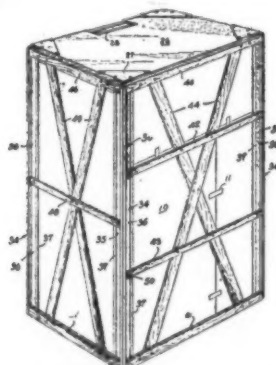
3. In an absorption refrigerating apparatus, a cabinet forming a food storage compartment and an apparatus compartment, said apparatus including a condenser, said apparatus compartment being provided with a duct for the circulation of air over said condenser, said condenser comprising banks of tubes having transverse portions and connecting portions inclined to cross said duct from front to rear so that air passing over each transverse portion does not contact adjacent transverse portions, and separate vertically extending offset fins on each of said tubes, the fins on a lower transverse portion extending vertically to a point substantially on the transverse plane of the next higher transverse portion.

2,317,520. REFRIGERATION. Curtis C. Coons, North Canton, Ohio, assignor to the Hoover Co., North Canton, Ohio. Application Feb. 5, 1940, Serial No. 317,387. 16 Claims. (Cl. 62-119.5).



1. An absorption refrigerating apparatus comprising circuits for liquid and gaseous mediums, power means for circulating said mediums, said apparatus being charged with a refrigerant, a pressure equalizing medium, an absorption solution and a non-distillable corrosion inhibitor dissolved in the absorption solution, said power means being so positioned in said circuits that distillate collects therein for lubricating said power means.

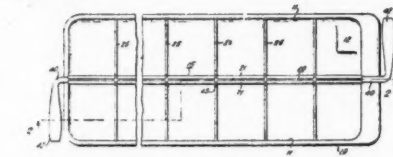
2,317,613. CRATE FOR REFRIGERATOR CABINETS AND THE LIKE. Matthew R. Hull and Emmett P. Summers, Connersville, Ind., assignors to Rex Mfg. Co., Inc., Connersville, Ind. Application Nov. 22, 1940, Serial No. 366,772. 8 Claims. (Cl. 217-36).



1. In combination with a cabinet for refrigerators and the like having a base,

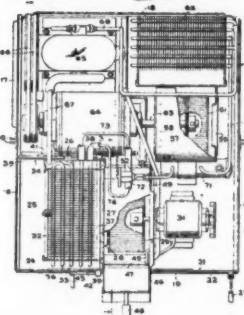
the base of the cabinet having a member having a slot therein, a crate for the cabinet having a base frame on which the cabinet rests, an angle bracket for detachably anchoring the cabinet to said base frame, said angle bracket having a foot secured to said base frame and a reversely bent locking tongue adapted to engage in said slot and clamp against the inner surface of said slotted member when said foot is secured to said base frame.

2,317,646. FREEZING TRAY. Frederick W. Sampson, Dayton, Ohio, assignor to General Motors Corp., Detroit, Mich., a corporation of Delaware. Application April 7, 1941, Serial No. 387,143. 4 Claims. (Cl. 62-108.5).



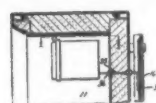
1. A partitioning grid for a freezing tray, said grid comprising: a main double wall comprising two resilient metal plates retained clamped together when the grid parts are in freezing position but having an inherent tendency to spring apart by bowing outwardly at their central portions, said main wall having a series of slots in the upper portion thereof, a series of cross walls each extending loosely through one of said slots in said main wall, said cross walls each having a lower slot therein extending upwardly from its lower edge and embracing the lower portions of said two metal plates in such manner as to clamp same together in opposition to their said inherent tendency to bow apart at their central portions, and force-multiplying means for spreading apart the upper portions of said two resilient metal plates by flexure occurring above the lower clamped portions thereof to facilitate the removal of frozen ice blocks from said grid.

2,317,709. REFRIGERATION APPARATUS. Carl F. Aising, Wilbraham, Mass., assignor to Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., a corporation of Pennsylvania. Application Dec. 10, 1941, Serial No. 422,342. 5 Claims. (Cl. 62-99).



1. In refrigerating apparatus, the combination of an insulated cabinet defining a low-humidity and a high-humidity compartment, a thermal storage liquid, a primary cooling unit for cooling the low-humidity compartment and the thermal storage liquid, means for intermittently supplying the primary cooling unit with refrigerant to maintain the temperature of said primary cooling unit between predetermined limits, a secondary evaporative cooling unit for cooling the high-humidity compartment, said secondary evaporative cooling unit having extended heat-absorbing surfaces, and a condenser for said secondary evaporative cooling unit, said condenser being in heat-transfer relationship with said thermal storage liquid, said thermal storage liquid having a congealing point of such temperature that a substantial portion of the liquid congeals when said means supplies the primary cooling unit with refrigerant and melts when said means does not supply the primary cooling unit with refrigerant.

2,317,775. REFRIGERATION APPARATUS. Robert A. King, Erie, Pa., assignor to General Electric Co., a corporation of New York. Application Aug. 23, 1941, Serial No. 408,007. 10 Claims. (Cl. 62-89).



1. In a refrigerator cabinet having a refrigerated compartment and a food storage receptacle within said compartment, means including a hermetically sealed container partially filled with a vaporizable liquid for transferring heat from a suitable source thereof to the interior of said receptacle.

2,317,816. REFRIGERATION APPARATUS. Carl F. Scott, Milford, Conn., assignor to General Electric Co., a corporation of New York. Application Aug. 23, 1941, Serial No. 408,008. 4 Claims. (Cl. 62-89).



YES... SOME MODELS
ARE
AVAILABLE

We are still manufacturing a limited number of models of Ranco Replacement Controls... precision built, long-lasting, accurate. With food rationed, it is essential that there be no waste. Ranco Controls can be depended on to protect food supplies, just as other Ranco-built precision instruments protect human lives on the many war fronts.

Jobber & Dealer Orders Now Equal Producers Under CMP Ruling

WASHINGTON, D. C.—Direction No. 1 CMP Regulation No. 3 has been revised to indicate that its intention is to place rated orders of dealers, distributors, and jobbers on a par with orders in the same rating band bearing allotment numbers.

The Direction does not have the effect of granting rated orders of dealers, distributors, and jobbers preference over other orders in the same rating band not bearing allotment numbers or symbols.

This means that a dealer's order rated AA-1 would have preference equal to a manufacturer's order rated AA-1 bearing an allotment number. However, the dealer's order rated AA-1 would not displace a manufacturer's order rated AA-1.

The Direction has also been revised to apply the equality of dealers', distributors', and jobbers' rated orders to all such orders. Previously it applied only those placed prior to April 7, 1943, calling for delivery not later than June 30, 1943.

VISOLEAK

SAVES time—SIMPLIFIES leak detection problems—CONSERVES refrigerant.

VISOLEAK reveals "hard to find" leaks of all refrigerants. Add 4 oz., plus an extra ounce for each 10 lbs. of refrigerant, to system.

4 ounces, \$1.00; 8 ounces, \$1.75. Pint, \$3; Quart, \$5; Gallon, \$16.

Buy from your jobber or write to

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Tyler's amazing progress in recent years represents a trend that will continue in the future. Investigate the profit possibilities for Tyler distributors; tie up with Tyler for long-swing prosperity. Write today. **TYLER FIXTURE CORP., NILES, MICH.**



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A COMPREHENSIVE LINE OF QUALITY HARDWARE FOR COMMERCIAL REFRIGERATORS
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OPA Rulings Clarify Some Points About Rationing Rules For Locker Plant Patrons

(Concluded from Page 1, Column 4)

There seems to have been no clear cut "national" OPA policy on these matters, and some of the decisions made by local ration boards relative to these points were so ridiculous as to have put locker operators in open rebellion of them.

A farmer who is going to consume all of the meat of his own which he slaughters, or has the locker plant slaughter for him, does not need a slaughtering permit, nor does he have to surrender any points for this meat.

However, a farmer who gets a farm slaughter permit from his County War Board can sell meats and accept ration points of future value. Furthermore, holders of such a permit can loan meat, this making it possible for farm families to exchange meat as has often been the custom in the past, so that neither family has to store excessive amounts at one time. Foods so loaned may not be sold by the person who receives them or by anyone else.

What of the City Patron

The locker plant patron who lives in a city but who operates a farm on which livestock is raised, and who can prove to the County Agricultural War Board that he is a livestock producer, can qualify for a "Butchers" permit, which enables him to use point-free the meat resulting from the slaughter, to loan meat in the manner outlined for the "farm slaughter" permit holder, and to sell meat—but he cannot accept points for that which he sells.

What then, is the fate of the locker patron residing in an urban area who has no assured supply of such fresh slaughtered meat? If he can find a farmer with a "farm slaughter" permit he may be able to get a supply, for the farmer is one such person who can accept ration points of future value.

There is one further solution which some operators of locker plants in urban areas are said to be trying. If the locker operator is able to purchase a side of beef, let us say, he may make a deal whereby a patron with a large family or a "combine" of patrons saves enough points over a period to buy a substantial part of this side of beef. Some operators make this easier for the patron by selling him such meat on a wholesale point basis.

Further information about the amendments to Ration Order 16 with reference to farm slaughtered livestock will be published in detail in a future issue of AIR CONDITIONING & REFRIGERATION NEWS.

A locker plant will be classed as a "primary distributor" under the OPA's RO 16 if it does slaughtering under its own permit, if it makes sausage, or does any processing on food covered by the order, or if it uses points to buy foods covered by the order.

Thus, most locker plants are primary distributors and must file reports under that category. Such reports must be filed with the nearest OPA office, apparently on Form R-1606, which should be obtainable from the local Rationing Board. Such locker plant operators as file reports as primary distributors must open a ration bank account, in accordance with the provisions of RO 16, Section 9.2.

Definition of Processing

Cutting, wrapping, and the subsequent chilling and freezing of meat are NOT defined as processing. Curing, smoking, and rendering are defined as processing. Section 3.3 of RO 16 states that when the patron delivers food to the locker operator to be processed

"he is entitled to receive from you points equal to the point value of the food, and when he gets the food back after processing, he must give to you points equal to the point value of the food he gets back."

What this means is that when the operator takes in foods to be processed, he gives the patron a ration check for the point value of the products left with him. When the patron gets his finished hams, bacon, or lard, he either returns the check or gives the operator sufficient points to cover.

If the locker operator does not

have a sufficiently large enough "ration bank account" for such requirements, he may, in accordance with Section 4.14 of RO 16, deposit in his ration bank account a "credit authorization" on OPA Form R-1608. This should be obtained from the County Rationing Board.

While the locker operator sells meats generally in wholesale cuts and at wholesale point values, he falls under the classification of a retailer and must register as such with OPA on Form R-1601. Thus, he will have to file reports both as a primary distributor and as a retailer.

TVA Home Dehydrator May Go Into 30,000 Homes In the South

WASHINGTON, D. C.—A plan put before a Senate Agriculture subcommittee calls for the distribution to housewives in Southeastern States of 30,000 home-size food dehydrators recently developed by the Tennessee Valley Authority. The campaign is to further the preservation of food which otherwise would be wasted because of the need for conservation machinery.

Priorities must be obtained on the recommendation of the Agriculture Department to the War Production Board, however, before the plan can be put into full effect.

In an effort to obtain a favorable

report on the project quickly, so that the new units may be used in the treatment of early Summer crops, Senator Aiken of Vermont, chairman of the subcommittee, has appointed Senator Stewart of Tennessee to confer with Agriculture Department officials.

The TVA had the cooperation of the Rural Electrification Administration and Southern land-grant colleges in developing the dehydrator.

Five 200-watt electric light bulbs provide heat and a fan to circulate air over eight glass trays containing the fruits and vegetables to be treated. All are contained in a wood

and insulation board cabinet three feet high.

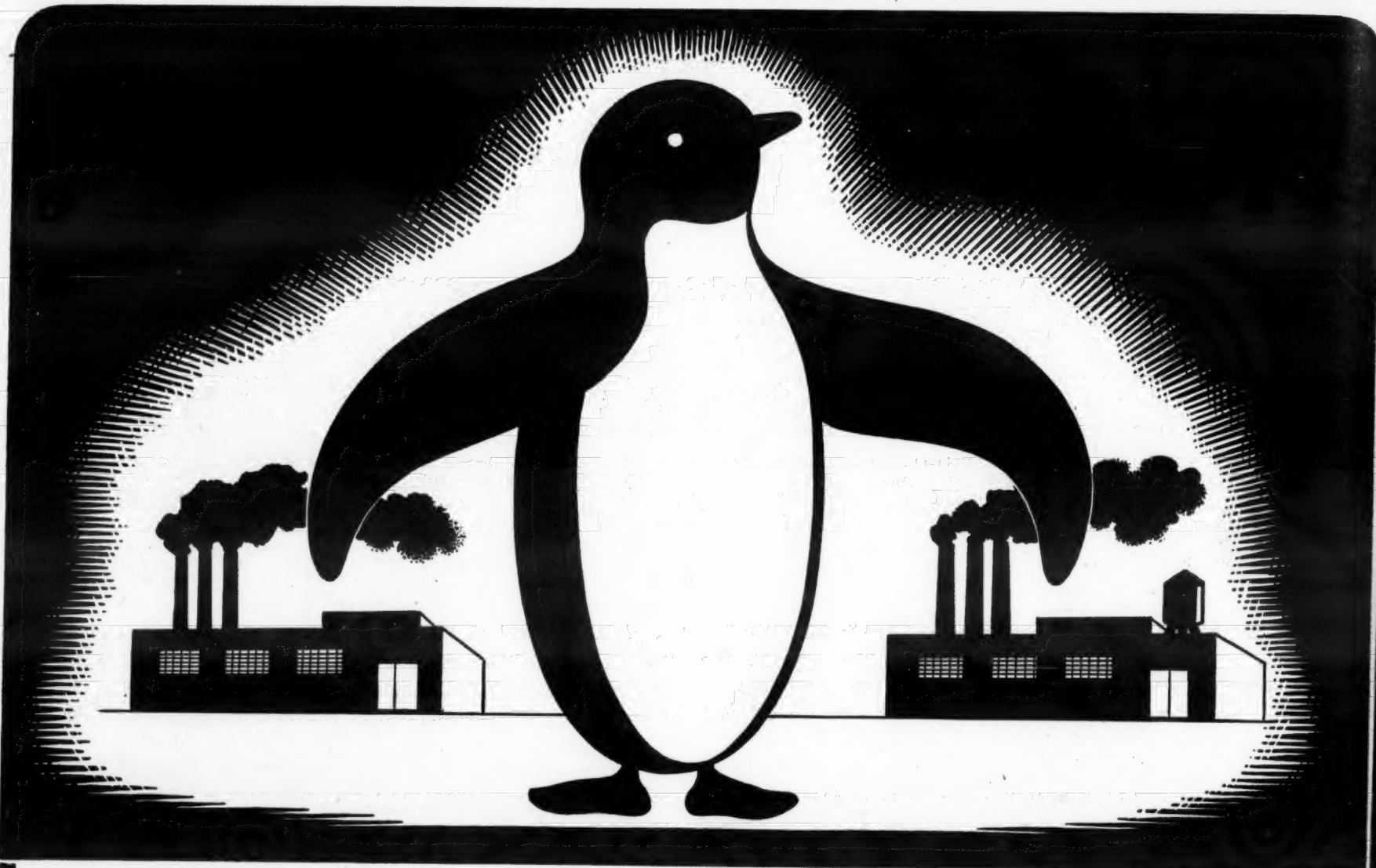
Capacity of the dehydrators is about one bushel; used for the 70 days of crop harvesting, one dehydrator is thought capable of preserving more than 1,500 pounds of produce.

Air Conditioning Speeds

Chilean Nitrate Output

SYRACUSE, N. Y.—Cia Salitrera de Tarapaca y Antofagasta, Chilean firm, recently purchased three Carrier centrifugal refrigeration machines, to be used in a new process for the refinement of natural nitrate.

Cia Salitrera already produces about one-third of Chile's natural nitrate, and the new process, based on refrigeration, is expected to greatly increase that output.



ESTABLISH YOURSELF NOW WITH US...



Look backward before you step forward! Double talk? Not at all...

Let's look at World War I... 1918. Certain lines of business, particularly those lines which combined a war and peace function, emerged prosperous and flourishing. War gave them foundation, strength and stature. War gave them research, personnel and experience. War was the spring board to peace-time prosperity.

In World War II refrigeration is such a business. Its present is tremendous! Its future is terrific. Because of refrigeration, our planes fly higher and faster, our army gets its full quota of vitamins, our navy keeps its powder cool and dry. Because of refrigeration, our armed forces have licked climate... as they will one day lick the Axis.

And as for peace-time potential... gentlemen, listen to this!

There will be ALL the old peace-time business... food preservation, air conditioning, commercial cooling... multiplied a hundred-fold by priority-dammed demand. There will be ALL the new industrial applications of refrigeration... spawned by war, approved by science, accepted by industry.

Bush is in on refrigeration's ground floor... for both war and post-war needs. Bush intends to STAY on refrigeration's ground floor... with both feet on the ground. But, after all, there's no harm in sticking one's head up for a look around. And, from here, our position... and yours... looks very pretty... very, VERY pretty!

Yours for the hottest spot in a cold, cold world...

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